

THE MUSEUM
AND
POPULAR
CULTURE

BY T. R. ADAM

EX LIBRIS
WHITNEY MUSEUM



OF
AMERICAN ART
10 WEST 8TH STREET · NEW YORK

l.c. 3/20/71

708
Adl.



STUDIES IN THE SOCIAL
SIGNIFICANCE OF ADULT EDUCATION
IN THE UNITED STATES

A series of studies to be issued over a five-year period by the American Association for Adult Education with the aid of funds made available by the Carnegie Corporation of New York

PUBLISHED

1. *Listen and Learn* by Frank Ernest Hill
2. *Why Forums?* by Mary L. Ely
3. *Enlightened Self-Interest* by Dorothy Rowden
4. *The Civic Value of Museums* by T. R. Adam
5. *Educational Experiments in Social Settlements*
by Gaynell Hawkins
6. *The Music of the People* by Willem van de Wall
7. *Women in Two Worlds* by Mary L. Ely and
Eve Chappell
8. *Man-made Culture* by Frank Ernest Hill
9. *The Public Library—A People's University*
by Alvin Johnson
10. *Outposts of the Public School* by Watson Dickerman
11. *Parents in Perplexity* by Jean Carter
12. *Everyman's Drama* by Jean Carter and Jess Ogden
13. *Rural America Reads* by Marion Humble

IN PREPARATION

See page 179

THE MUSEUM
AND
POPULAR CULTURE

BY T. R. ADAM

AMERICAN ASSOCIATION FOR ADULT EDUCATION

NEW YORK · 1939

COPYRIGHT, 1939, BY THE
AMERICAN ASSOCIATION FOR ADULT EDUCATION

George Grady Press New York

Foreword

IN seeking to widen opportunities for cultural living, the first objective is the search for instruments available to those engaged in the stress of everyday life. This hunt for the physical means through which mature people may strengthen their intellectual life leads to the examination of many institutions neither created nor maintained for the single purpose of popular education. Potential facilities have to be surveyed before they can be utilized efficiently. Wherever the possibility of adult education exists, it must be isolated from other entangling elements, which may, in fact, constitute the dominant factors of the organization under scrutiny.

In studies of this nature, then, institutions are examined with a partial eye. The focus of attention is narrowed to a single center—the nature of existing and potential facilities for the continued education of mature citizens. Museums can not be described completely in terms of popular learning, and the following chapters, in consequence, do not give a fair appraisal of the museum movement in all its varied aspects. This study is limited to an evaluation of the specific types of museum activities that touch on the diffusion of learning among the adult population.

During recent years considerable attention has been paid to placing before the general public information on every form of subject, from political economy to pure science. This movement is part of the defense reaction of the democratic process to the increasing threats of hostile forces within and without the state. The tendency toward popularization of knowledge—practical, political, and cultural—marks the growth of a concept of social education; of learning as an instrument of democratic action. In these circumstances, traditional academic practices are inadequate as guides to the new development. Formal methods of schooling, philosophic divisions of subject matter, and professional teaching institutions possess too narrow a base to satisfy the urgent social need for the wider sharing of knowledge. The new instruments that have appeared in answer to pressing wants lack clear-cut form and proper coordination with one another. Adult education still lacks traditions, continuity, and unity of organization throughout its manifold branches.

The American Association for Adult Education is one of the factors of cohesion giving strength and form to the growing movement. Its scope lies in the cultural field separate from, though complementary to, the political sphere of directed social training. As part of its functions, the Association is engaged in making valuations of the actual and potential instruments of wider learning. Without this exploratory work, the movement toward popular education might flow into numerous separate channels divided each from the other by barriers of professional organization. The recognition of a common movement, transcending the particular skills and professions of the varied participants, is the first necessity for the healthy growth of widespread popular learning. Wherever adult education activities

can be discovered and evaluated in the routine work of commercial, professional, or research organizations, the act of evaluation adds a responsible recruit to a common service.

In the particular case of museums, these bodies have long played an important part in providing their communities with facilities for adult education in the arts and sciences. Their achievements in this respect have perhaps been overshadowed by traditional obligations to the tasks of forming collections and encouraging research. In recent years school education has occupied a prominent place in the foreground of museum activities. For these reasons, the public in general and educators in particular have been apt to overlook existing services and potential opportunities provided by museums for adult citizens. This book, though merely summarizing material well known to museum officials, may serve to introduce outside organizations to unsuspected resources of information and exposition.

When institutions as complicated as museums are regarded from the single point of view of their usefulness in the sphere of adult education, a certain distortion in perspective is bound to result. While the cause of adult education seems worthy of advancement, the writer acknowledges that the importance of other cultural factors present in museums may have been neglected or underemphasized. As a matter of conscience, it must be reported that information and opinions supplied by members of the museum world in conversation or otherwise constitute the basic material of this book. Yet acknowledgments due contributing authorities, if published, might be misinterpreted as claims to their support in matters affected by the writer's honest bias. Therefore, the writer must subscribe himself as indebted to a generous body of anonymous scholars.

T. R. ADAM

Table of Contents

	PAGE
Foreword	v
Perspective	1
Vested with a Public Interest	16
The Educational Function	31
Art and Culture	48
Art and Society	70
The Revival of Nature Lore	89
Methods of Nature Study	108
Science, Industry, and Commerce	123
History as a Hobby	136
Beyond Museum Walls	149
For Greater Public Support	163

Perspective

IMPOSING façades of museum buildings rear themselves in every aspiring town in this land as steel, stone, and marble tributes to some revered purpose of our democracy. Cynics might maintain that the urge to erect monuments is a-thing-in-itself; that as a nation we hold the record for the number and magnificence of museum edifices because our commercial cities must be leavened with some form of public temple. A point of view so shallow and uncomplimentary to our social intelligence obviously contains scant grains of truth. In so far as many of the outer shells of our museums are relics of public fairs and exhibitions—the Roman triumphs of a mercantile democracy—it may be true that the monument preceded the social and cultural purpose of its later use. This accident of growth, however, must not blind us to the true nature of the soil providing subsistence to the flourishing life of the American museum.

It would be perhaps an extreme fantasy to view some obviously twentieth century institution, such as the Carnegie Museum at Pittsburgh, an exponent of the realistic sciences of the present day, as a temple built in honor of the dreams of the mysterious Rosicrucians. Yet the roots of the idea which made possible this Museum and all public science museums in modern

life sink into the underground world of secret societies in the seventeenth century.

We are apt to underestimate the importance of origins in appraising present-day institutions. We judge the development of museums as instruments for popular learning in science, in history, and in art as if the objective of widespread knowledge among the masses had always been an avowed aim of our culture. In historical fact, we have had less than two centuries of open acknowledgment of a general right of access to the uncensored tools of learning. In many fields, particularly those that touch upon the domain of theology or human biology, such freedom as exists for the untrammelled propagation of facts and opinions is of very recent origin. For at least ten centuries during the formative period of our Christian era, the widespread propagation of critical and factual information concerning man and his environment was not only physically difficult but also anathema to all the powers that ruled the community of Christendom.

The diffusion of knowledge, then, is a modern idea, revolutionary in the true sense of the word, and scarcely yet stable in the basic pattern of society. Over a considerable section of Europe, critical enlightenment for the mass of the people is once more a secret, unlawful objective driven underground by the modern excommunication of bullet, club, and concentration camp. The Rosicrucians, or their modern equivalents, are still needed as conspirators against the authority of Church and State to spread the forbidden light of uncensored learning. The underlying concept of museum work, the diffusion of knowledge based on research and experiments rather than on transcendental authority, has had a hard struggle to break through the fears and apathy of social conservatism. Progress has been made, but

victory is still far in the distance; the battle of the museums for the right to educate must be looked at in perspective before present conditions can be fairly judged.

The practice of forming collections, whether of objects of art or of the rarities and curiosities of natural history, may be said to date from the sixteenth century. The early collections, however, were the toys of the wealthy and the eccentric. The true ancestors of the movement were probably the secret scientific societies, such as the *Societas secretorum naturae* of Naples formed in Italy during the sixteenth century.¹ Both the Roman Catholic and the reformed churches were far from friendly to the exponents of experimental science, and the educational fanatics of the day had to resort to conspiracies. The members of the international secret society calling themselves Rosicrucians² were one of the forces active in breaking down the barriers. It was they who first made a slogan of the term "diffusion of knowledge," and it was their "Invisible College" at Oxford, founded around 1645, which later developed, in 1662, into the classical Royal Society.

Colonial America came under the influence of the Rosicrucians and the Royal Society through the Honorable Robert Boyle, a charter member of the Society and Governor of the Corporation for the Propagation of the Gospel in New England. Boyle was strongly influenced by the Czech educator Comenius, whose *Via Lucis* was "a reasonable disquisition how the intellectual light of souls, namely wisdom, may now at length at the

¹ Robert Fitzgibbon Young, *Comenius in England*. Humphrey Milford, 1932.

² Hans Nicolas, "The Rosicrucians of the Seventeenth Century." *British Institute of Adult Education Journal*, 7: 229-40, 1934-35.

approach of this eventide of the world be happily diffused through all minds and people." In his correspondence with John Winthrop the younger, Boyle showed himself keenly interested in the education of the native Indians of New England and Virginia and also anxious to promote the spread of the new "experimental philosophy" at Harvard College and elsewhere in America. In fact, Brafferton Hall for Indian students was established at the College of William and Mary in 1696 from funds bequeathed by Robert Boyle.

England and her colonies led European civilization during the seventeenth century in the dissemination of the new learning. Thomas Spratt writing in 1667 on the history of the Royal Society could well boast: "So that even the position of our climate, the air, the influence of the heaven, the composition of the English blood, as well as the embraces of the Ocean, seem to joyn with the labours of the Royal Society to render our Country a Land of Experimental Knowledge."

The great social movements that transformed European culture in the eighteenth century were closely linked with the principle of the popularization of knowledge. The intellectual foundations of authoritarian churches and states could not withstand the spread of the methods of experimental reasoning beyond the easily disciplined bounds of a narrow scholar caste. A French scholar points out the revealing fact that museums and encyclopedias appeared together.³ In England the publication of Chambers's *Cyclopaedia* was contemporary with the creation of the British Museum; France opened the doors of the royal collections of Luxembourg to the public at the same time as the

³ René Huyge, "Le Rôle des Musées dans la Vie Moderne." *Revue des Deux Mondes*, 15 Octobre, 1937.

program of the Encyclopaedists was first published. The social consequences of the latter event are too well known to require emphasis, and we may include the French Revolution as a perhaps necessary event in the development of the public museum!

The first American museum is generally credited to the Charles-Town Library Society, founded in 1773. Despite the close coincidence in dates, there are no grounds for believing that this society or its exhibition policy played any part in preparing the way for the American Revolution. However, the growth of museums as instruments of popular education can not be divorced from the social turmoils that paralleled their birth. They were in the past and perhaps always should be symptoms of a revolutionary state of mind, rebelling against the confinement of scientific and artistic knowledge within the narrow prisons of class and privilege.

In Europe, when the treasures of princes and churches were brought before the eyes of the public as a communal heritage, the step was acknowledged as marking the social victory of democratic over aristocratic principles. America has always had the task of putting in practice the social doctrine of equal opportunity for all. It is not surprising, then, to find that the museum, in its character as a new instrument of democratic culture, flourished on American soil during the first century of our history.

As Paul Rea points out in *The Museum and the Community*,⁴ one of the earliest types of museum in the United States was the college museum of natural history. The purpose of these institutions was strictly educational. The methods now described as

⁴ Science Press, 1932.

“visual education” were used most effectively to impress students and the visiting public with the order of creation as conceived in terms of natural theology. The Darwinian controversy in the latter half of the nineteenth century destroyed the validity of exhibitions arranged to demonstrate that the laws of nature and the rules of theology were perfectly matched.

As a result, college museums sank for the most part to the status of auxiliaries to laboratory research. It is worth noting, however, that a considerable part of our popular education in natural history comes to us by hereditary descent, if not in an unbroken line, from such bodies as the Peabody Museum of Natural History, founded at Yale in 1802; the Mineralogical Collection of the University Museum at Harvard, begun in 1784; the Dartmouth College collection, started around 1783; the University of Ohio Museum, dating from 1823; and many other college museums.

The early academies of sciences, particularly those of Philadelphia, New York, and Maryland, were important landmarks in the diffusion of learning in America, and their labors took concrete and lasting shape in museum collections. The New York Academy of Sciences, founded around 1815, obtained a legislative charter in 1818 as a lyceum of natural history, and it may be fairly ranked as the spiritual parent of the American Museum of Natural History. The Academy of Natural Sciences at Philadelphia has an honored place in American social history. It is noted not only for its roster of famous scholars, but also for its participation in revolutionary movements for popular education during the early nineteenth century. William Maclure, the founder of the Academy; Speakman, its original host in the backroom of his chemist shop; Thomas Say, the naturalist; and

Charles Lesueur, the explorer, were all participants in Robert Owen's social and educational experiment at New Harmony.⁵

The impetus that such bodies gave to the conception that popular education is a major instrument for the relief of poverty and social inequality has not been exhausted even at the present day. Men of good will in the nineteenth century relieved their distress at social suffering through practical action in the field of education as frequently as in the field of politics. Learned societies, museums, libraries, colleges, and schools were intended as weapons of social action and were to a great extent moved by the dynamic of this larger purpose.

The conception is historically sound; the widening of popular ideas and the spread of new loyalties have always effected social changes more efficiently than the police power of armies or the finagling of politicians. In fact, it might be hazarded that the diffusion of learning is the only way in which human societies have ever achieved an intelligent adaptation to their environment. Whatever the validity of this surmise, it is certain that the extreme specialization of the modern institution of learning, such as the museum, is based on a social disillusionment not warranted by the facts of its own growth. Museums are still revolutionary social forces, though their powers for direct action may have lain dormant for a few brief decades.

Scholars rearranging and classifying objects in dusty laboratories, research men filing forgotten notes to history, and art directors hanging abstruse forms in deserted galleries are all playing with the social dynamite of intellectual innovation. At any moment some specialized discovery may unwittingly tear

⁵ Kenneth M. Gould, "Robert Owen: Backwater of History." *The American Scholar*, 7: 153-70, Spring, 1938.

down a customary habit of thought on which far-reaching and complicated social structures were based. The museum, whether of natural history, science, ethnology, or art, can not avoid influencing the mores of the society in which it is situated. The public duty that must always confront it is to make its influence intelligent, open, and purposeful, instead of accidental and irresponsibly sportive. If the general public is encouraged to follow the gradual advance of scientific and artistic knowledge by being taken into the confidence of scholars, it may learn to avoid the sudden and perilous shocks to social sanity loosed by a Copernicus, a Darwin, a Karl Marx, or even a Salvador Dali.

It is significant that the first half of the nineteenth century witnessed the growth of a substantial number of historical societies throughout the United States. The Massachusetts Historical Society led the way in 1790 and was quickly followed by the New York Historical Society in 1804. By 1822 the movement was fairly launched, with the Essex (Massachusetts) Historical Society, the Maine Historical Society, the Rhode Island Historical Society, and the New Hampshire Historical Society commencing the campaign that was to cover the continent with repositories of local history and folklore. The appearance of these forerunners of a museum movement was no accident of chance. They represented the necessary foundation that had to be laid for the creation of a working ideal of American unity.

All over the world during this period men relied heavily on the inspiration of the past, anchoring their societies after the storm of the French Revolution on a veneration for traditional—classical tradition, religious authority, or national customs. The infant republic had to dig its roots into stable intellectual soil,

and these bands of antiquarian missionaries served a pressing social need. They grew, they flourished, and they decayed with the changing demand for their services.

At the turn of the nineteenth century, respectability—that nemesis of a tradition-loving society—descended to smother the vitality of historical societies, natural history museums, and the struggling art galleries. The paralysis of social purpose that followed gave to museums the fusty reputation they have unjustly held in the public mind till the present day. If museums at this period became, as René Huyge declares, a refuge for scholarly dreamers and aesthetes against the realities of practical life, the fault lay for the most part in the hypocrisy of the public mind. The old values created by tradition were being rapidly undermined by the mechanistic sciences natural to the adolescence of industrial communities; yet popular morality insisted on a surface observance of the outmoded standards even while applying the useful new knowledge to the everyday business of living. In consequence, scholarship, history, and art were thrust out of the market place into the Valley of Tombs, where the Victorian generation worshipped its ancestors in the spirit of genteel hypocrisy.

Museums during this period became convenient repositories for a type of learning too humanistic to be safely tolerated in a factory-ridden culture and too wrapped in the essential traditions of the people to be openly despised. In France, England, and America the explosive ideas loosed in the eighteenth century were neatly quarantined in decaying buildings guarded by moribund societies.

The habit of freedom in ideas, however, once formed is difficult to repress. The “experimental philosophy” that had given

birth to the museum movement was a branch of the stout tree of the Protestant Reformation and could not be lopped off even in the interest of social efficiency. The diffusion of knowledge of the classical type through popular visual display was arrested by the sabbatizing of the museum; this, however, merely led to the creation of a new type of visual instrument to meet the general demand for instructive pageants of the learning of the times.

The birth of the long succession of world's fairs at the Crystal Palace at London in 1851 marked a new step in the social power of museums. At last the new useful arts and sciences came to be acknowledged as the proper study of the community. The lag between formal learning and social needs tended to disappear, and popular demand was once more aroused for the dissemination of scientific and artistic culture in terms of intelligent display open to all ranks of citizenry. The international exhibitions were, of course, commercial enterprises based firmly on the profit motive, yet they opened the way for the renaissance of the modern museum in terms of dramatic displays relevant to the social life of the community.

Prince Albert echoed the pious sentiments of his mercantile subjects in a Lord Mayor's Banquet speech prior to the opening of the London Exhibition: "Whilst formerly the greatest mental energies strove at universal knowledge, and that knowledge was confined to few, now they are directed to specialties, and in these again even to the minutest points. Moreover, the knowledge now acquired becomes the property of the community at large. Whilst formerly discovery was wrapt in secrecy, it results from the publicity of the present day that no sooner is a discovery or invention made than it is already improved upon and surpassed by competing efforts."

Horace Greeley in a lecture on "The Crystal Palace and its Lesson" contributed an American rhapsody in praise of the new development. "The Crystal Palace was the first edifice ever built for and consecrated to the uses of Universal Industry. It was the first structure ever devoted to the advancement and diffusion of the Useful Arts throughout the world—the first in which, to the greatest extent consistent with individual selfishness, the arcana of skill and production were thrown open to all mankind with an express invitation, 'Come hither, and see how the most successful workers accomplish their ends, and learn to rival or excell them if you can.' Herein was assembled the first general convention or council of Captains of Industry—the first practical Peace Congress ever held."

The movement for dramatic, educational exhibitions as a stimulus to science, commerce, and industry found fruitful soil in the young American Republic. The industrial fairs conducted by the Franklin Institute of Philadelphia since its founding in the year 1824 and the annual fairs of the American Institute of the City of New York dating from 1828 are important events in the social history of the nation. They provide illustrations of dynamic methods of visual education being applied to the attainment of direct social objectives. While the Franklin Institute was more concerned with raising the level of American workmanship by increasing the part played by science in industry, the American Institute concentrated on the semi-political question of protection for American industries. It is difficult to gauge how far the creed of scientific efficiency in industry, with its stepchildren, mass production and technological unemployment, can be laid at the doors of the Franklin Institute. There were naturally many other environmental factors at work, yet the visual education provided by the fairs made

concrete and more powerful an essential element in the national character.

The creed of industrial protection sponsored by the American Institute was part of a complex social movement which may or may not have required a program of popular education for its achievement. Nevertheless, the succession of Institute fairs pounded a message into the malleable consciousness of the young Republic. Visual education proved a powerful social instrument in a community where formal schooling and the arts of communication had not yet reached their heights. The emotional fervor roused by these fairs toward building American ideas of civilization was recognized by the poetic intuition of Walt Whitman. The poet opened the fortieth annual fair of the American Institute with the delivery of a long poem chanting the place of exhibitions in his dream of America:

Mightier than Egypt's tombs
Fairer than Grecia's, Roma's temples
Prouder than Milan's statued, spired Cathedral,
More picturesque than Rhenish castle keeps
We plan, even now, to raise beyond them all,
Thy great Cathedral, sacred Industry—no tomb,
A Keep for life for practical Invention. . . .
In large calm halls, a stately Museum shall teach
 you the infinite, solemn laws of Minerals:
In another, woods, plants, Vegetation shall be
 illustrated: in another Animals,
 animal life and development.
One stately house shall be the Music House,
Others for other Arts—Learning, the Sciences
 shall all be here;
Somewhere within the walls of all,

Shall all that forwards perfect human life
be started,
Tried, taught, advanced, visibly exhibited.
Here shall you trace in flowing operation,
In every state of practical busy movement
The rills of civilization.

None shall be slighted—none but shall here be
honor'd, helped, exempl'd.
This, this and these, America, shall be your
Pyramids and Obelisks,
Your Alexandrian Pharos, gardens of Babylon,
Your temple at Olympia.⁶

There has been no scarcity of Babylonian gardens and Olympic temples in the modern manner since Whitman's day. The Centennial Fair in Philadelphia in 1876 started an era of popular displays of art, science, and industry that is still gathering force. These exhibitions not only have provided the buildings and initial finances for many of our permanent museums but also have stimulated popular demand for the type of educational services which can be met only by active museums. M. Huyge points out that the example of the United States in founding numerous museums during the twentieth century has had a profound effect on the cultural force of these institutions throughout the world.⁷ He attributes to Americans a keen desire to make museums efficient in reaching the mass of the people and in influencing social customs. The consequence of the movement, he feels, has been to restore the museum to its place as an organic element in national life.

⁶ Bellamy Partridge, "The History of the American Institute" (unpublished manuscript).

⁷ *Op. cit.*

The fashion of holding exhibitions and the growth of museums during the twentieth century are related factors in a deep social movement that is attempting to find the proper instruments to adapt men to their changing environment. The diffusion of knowledge—of understanding of the tools of modern life—is necessary to the existence of a free civilization. It is a political and economic necessity as well as a cultural ideal. Unless some form of understanding of the social, scientific, and aesthetic bases of our society can be shared in common by the bulk of the people, we can not escape modified slavery. Where clear knowledge is lacking, superstition or emotional prejudice takes its place and the tyrant rises to social power.

Museums can be recognized as instruments of an early enlightenment. It is sometimes said that they played their part and died, in spirit if not in body, before the birth of the twentieth century. The facts say that they are physically more alive today than at any period in history. Cynical theories concerning the perseverance of dead institutions offer a childish explanation of existing conditions. History and the scholar's love of the past are stable phenomena, but the institutions that present history to the common man are conditioned by varying social needs. The stirring of new life that is today visiting the innumerable history museums and libraries after many years of indecisive sleep testifies to a renewed urgency in popular demand. Ideas and principles, shrouded in manuscripts, encysted in relics, must be dragged once more to the light for re-examination and possible political use. The history museum and its scholars and custodians are preparing to give American history back to the American people.

Viewed in proper perspective, museums can be seen to be

powerful instruments of popular education affecting the social history of our people. The need for the rapid diffusion of new knowledge is not constant but varies in accordance with the rate of change in the social environment. When society can afford to pursue traditional paths, custom and habit are the best educators; when science or politics or industry suddenly breaks through into new fields, the community stands in danger of chaos until methods of spreading the essential facts of the new outlook have been discovered and perfected. There can be no social stability until a changed environment has been reduced in men's minds to accepted custom based on a common understanding of the forces at work.

It is this element in museums—their use as modern weapons in the struggle for popular enlightenment—that has caused them to flourish so successfully in our times. Separated from its social content a museum is meaningless to anyone but its curators. We are fortunate in possessing in this country a museum movement that is consciously seeking to base its fortunes on the performance of forward-looking tasks rather than on smug memories of the past. A time element exists that gives a dramatic quality to the present situation; cultural upheavals are taking place all around with a rapidity scarcely ever equaled in history. Museums, like all institutions, are slow and cautious in their adaptations. Whether the instruments we need to initiate men in the mysteries of our emergent civilization can be made ready in time, before ignorance and suffering destroy the physical basis of our culture, is a question few would be hardy enough to answer.

Vested with a Public Interest

THE theory that museums are an organic part of the social structure places these institutions in as close relation to the social pattern as political parties or moving picture theatres. Their origin is linked with the emergence of democracy as an ideal of social organization, and their development with the same forces that extended political, economic, and educational opportunities to increasing numbers of the population.

If we assume that museums can exist only in communities where there are strong tendencies toward popularization of social advantages, including education, then we obtain some practical criteria by which to judge existing institutions. In the first place, the strength of particular museums ceases to be accidental—the result of unusual personalities and exceptional benevolences—and becomes instead a partial reflection of the condition of the community: a flourishing museum in a city of moderate size can be taken as a symptom of rounded democracy. In the second place, the obvious lethargic weakness of many museums should not be attributed solely to inherent defects in management but also to failures in the body politic of their localities. The task of museum authorities is often primarily political: to arouse the community to a sense of democratic need in the sharing of artistic and intellectual culture.

One of the major obstacles to the complete acceptance of museums as a test of the democratic culture of communities lies in the complicated financial structure of these institutions. For example, museums must be judged on a different basis than public schools. When the proportion of tax funds allotted to the schools is equal to, or higher than, that of other communities throughout the state or nation, the district in question may be considered in the forefront of progressive democracy in one respect at least. But museums are only partially and occasionally maintained from tax funds. A community that can boast an active museum endowed by a wealthy benefactor or by a small privileged group may be held in some quarters to have little right to claim that institution as a token of cultural democracy. It is easy to be blinded by the latest definition of public moneys and to view compulsory taxation as the only method of social contribution.

The history of American museums, however, shows that community effort can take many different financial forms and still remain a community triumph. The benefactions of a single individual can sometimes found and maintain a museum, close to the local pattern of living, and supported, used, and developed by the people. The Worcester Art Museum is a particularly good example of this type of privately endowed institution, the gift of a single individual who managed to efface himself in satisfying a civic need.

There are other examples of individual benevolences which have resulted mainly in marble monuments to the eccentricity of the donor. The community has held aloof, either because it was not sufficiently advanced to make use of cultural advantages of the type provided or, as is more often the case, because the donor surrounded the gift with conditions that have made the

institution a reflection of personal whims. The public, since the days of Nero, has been only mildly interested in the architectural follies of the great.

The Joslyn Memorial in Omaha, Nebraska, is an example of a private benevolence made without articulate public demand. The benefactor created a public monument of contrasting marbles that is highly praised as a functional art museum. It is, however, a "foreign object" in the developing native culture of the state, and there is little doubt that certain sections of the community resented the "extravagance" when the Museum was created. Public indifference and even ill feeling provided a direct challenge to the Museum authorities. In the course of a decade or so, chiefly through the common sense of the director and the staff, the Museum has been made part of the civic life of Omaha. Lacking a notable permanent collection, Museum funds were used to bring in temporary exhibitions of forthright popular art, attractive to Omaha's developing taste. Musical, literary, and other activities were centered in the Museum, and the public came to feel that the blight of snobbish particularity had been lifted from their Museum.

The development of the Joslyn Memorial has been an honest social achievement that can be judged apart from any general aesthetic theories. The community has been led into cultural activities, not so much by the gift of a building, however magnificent, as by the yeoman services of staff members who frankly regard themselves as public servants. The concept of social and political service made this institution a true community center despite its initial handicaps.

The Nelson Galleries of Art in Kansas City have had something of the same problem as the Joslyn Memorial in bringing

private benefactions into the stream of civic life. Kansas City, however, had a flourishing art association supported by representative elements of the community before the Nelson Galleries were founded. Nevertheless, bringing public loyalty to the support of an institution created by a single individual has been difficult. To some extent, the community and the Museum have been separated by inelastic provisions in the will of the founder. The principle that a museum is an instrument of democratic living, suiting itself to the cultural growth of its neighborhood, does not develop freely under circumstances of this kind.

In the case of the Nelson Galleries, as in the case of the Joslyn Memorial, the maladjustment can be attributed to communal politics rather than to an economic barrier or a problem of educational theory. When museums are regarded as expressions of group life instead of lofty missionaries to the cultural heathen, the practical responsibilities of the controlling officials become more apparent. Before effective education or even active custodianship is possible, a certain amount of social engineering has to be undertaken. The institution must become a part of the community and so reflect its growth that people may see in it their own familiar culture, clarified by the eternal values of art or science but still recognizably their own.

When private wealth and taste seek to dictate to the community through a rigidly controlled foundation, the resulting institution should be classed as a show place rather than a true museum. Some of these contributions by wealthy dilettanti provide delightful backwaters to the main stream of our common culture. In general, they are restricted to the fine arts, though one of the most active of these personal manor houses of culture

is a museum of steel craftsmanship created by the president of a Worcester steel mill. These institutions resemble privately printed books: they carry a message; they propagate a point of view; they proclaim a faith; but they do not pretend to rely for their existence on the stamp of vulgar approval. They are missionaries to the gentiles rather than servants within the courtyards of democratic culture.

The value of these foundations should not be belittled. The very fact that they are guarded from the social pressures of the contemporary world permits them a daring eccentricity that sometimes presents eternal values. Democracies need to be challenged, irritated, and amused as well as educated in common understanding.

The Gardner Museum in Boston, created, endowed, and ruled by the will of Mrs. Isabella Stewart Gardner, is a delightful example of a show place of art objects. The atmosphere of this proud house with its flowering courtyard, its cool galleries, and superb vistas is deliberately aristocratic. The excellent collections are arranged in the manner prescribed by the late founder as an expression of her personal taste. The public may admire but may not question.

On the pragmatic basis of use and enjoyment the Gardner Museum probably ranks high among the museums of the country. People appreciate the opportunity to observe the taste and hobbies of their wealthy neighbor as expressed in her collections; students and connoisseurs find many objects worthy of reverent regard. A museum of this character is a luxury the community can well afford. The Museum of Fine Arts in Boston and the Fogg Art Museum in Cambridge serve as powerful educational instruments equipped to meet the needs of the people

on a basis of democratic culture. The Gardner Museum's challenge to public taste is provocative and stimulating; the task of education is left to institutions more directly linked to community interests.

The source of funds for the formation and endowment of a museum is not the true determinant of its character. A community enterprise may be originated and developed by a civic statesman without financial cost to the public; on the other hand, citizens are often taxed to support institutions nominally public but in practice the private hobbies of strong-willed cliques. The strength of the belief in public service held by the actual governing body of the museum at any one time is the true determining factor.

Once museums are acknowledged as community enterprises requiring political skill in direction to maintain their proper place in the body politic, then the question of financial support fits into its proper perspective. Money should be obtained from whatever quarters show themselves willing to subscribe to a community enterprise that will literally belong to the public in spirit and in deed. Private citizens have both the right and the ability to give their communities benefits that might lie beyond the powers of public officials in control of tax moneys. In the educational field the source of funds is particularly unimportant, and the character, independence, and avowed purposes of the governing body are the true architects of a museum's ideals. Support drawn from sources that seek a return in terms of personal control will cost the museum dearly and may condemn it to a barren existence as a show place. This principle applies as strongly to tax money as to private gifts; politicians are as apt

to demand a *quid pro quo* as the most haughty benefactor. Museums that exchange their souls for tax funds are likely to find city councils sharper bargainers than Master Faustus found the devil himself.

In *The Museum and the Community* Paul Rea advocates a financial base for museums, constructed on a tripod of capital endowments, annual gifts, and public funds. He cites the American Museum of Natural History as the soundest example of this type of support. Of approximately \$40,000,000 received by this institution from its founding to the year 1927, endowment gifts accounted for 49 per cent, the city contributed 39 per cent for buildings and maintenance, and the remaining 12 per cent came from membership contributions and special gifts. The distribution of interest that comes from this form of support is obviously desirable. It is too great an assumption, however, to suppose that the American Museum has been affected measurably in its policies toward the public by the sources of its income. The controlling factor in this Museum has been the Board of Trustees and the professional staff. Their concept of the Museum as a public institution and their statesmanship in community service have been of more practical moment than any statistical shift in the basis of income. If the city cuts its appropriation for the maintenance of the Museum buildings, as it has done too often in the last few years, the economic power of the Museum to give public service is directly crippled. Yet as long as the Museum is able to keep its doors open, it is improbable that it will alter its basic policy of existing as an instrument for public education.

Boards of trustees and professional directors are not generally

well known to the community. They are apt to efface themselves behind the name of their institutions, personifying the museum as a character august, solemn, and unapproachable. In consequence, the responsibility for practical policies is generally unclear to most of the members of the community, and they find difficulty in expressing their suggestions for more effective service or their criticism of museum weaknesses in community relations. Clear-cut responsibility on the part of accessible leaders is the primary requisite of a democratic society. When the people have ready access to officials controlling definite spheres of policy, they seldom hesitate to come forward with suggestions and complaints. This is accepted as an elementary principle by experienced public-service bodies, such as telephone companies, who devote considerable funds and organization to building clear pipe lines between their multitudinous customers and their responsible executives.

The educational objectives of museums require a similar outlook on the part of controlling authorities. Members of the community must be able to express their views through one channel or another and have their practical needs translated into active policies by skilled executives. Otherwise the institution exists outside the social frontiers of the communal life, and its activities are a continual gamble based on inadequate information.

One of the best examples of a museum that has built itself into civic life through frank relations between its officers and the community is the Buffalo Museum of Science. The parent body of this institution was the Buffalo Society of Natural Sciences, founded in 1863, and the creator of a small museum of its own where it labored to provide public education under the handicaps of inadequate facilities and little money. In 1923 the

Society persuaded the City of Buffalo to submit to a referendum vote a proposal for the building of a museum at an approximate cost of \$1,000,000, for the use of the Society of Natural Sciences. By a skillful educational campaign the officers of the Society convinced the voters of the desirability of this project. A strong point that won many votes was that the proposed museum was to be located in the center of a crowded and far from wealthy district. Since the Museum was built in 1928, the Society, under the presidency of Chauncey J. Hamlin, has stood out as a service body believing in the worth of its work, anxious to obtain its fair share of public and private support, and ready to accept the criticism and suggestions of any articulate section of the public.

Lord Sankey has described adult education as a process of colonization, and the phrase is a sound estimate of the means by which Buffalo obtained one of the most active science museums in the country. The cultural bonds of Buffalo were too narrow for some of the more eager minds in the city. They chafed at their limitations and began to organize a new territory of their own. The "colony" did not succeed, however, until an able political leader appeared on the scene. The support of the "motherland" was necessary, and skilled negotiations and public education were required to launch the new development on practical terms. The success of the venture has opened up new intellectual lands for great sections of the population and has widened the influence of Buffalo on its own inhabitants and on other elements throughout the country. The analogy may tempt one too far, but the resemblance between this process and the growth of the civilization of the Greek city-state through peaceful colonization is at least striking.

Another interesting statesman in the museum world is Henry

P. Treide, the President of the Board of Trustees of the Baltimore Museum of Art. He has placed in operation a plan of community partnership which is probably more thorough and extensive than that of any other museum of like resources. The City of Baltimore was analyzed in terms of practical social operation. Two hundred and twenty-five organizations, from labor unions through advertising clubs to racial groups, were listed as representative of the city's activities. These organizations were then persuaded to appoint committees to canvass their own members and to represent their groups in direct dealings with the Museum. In effect, Mr. Treide has issued "stock" in the Museum throughout the whole community by a comprehensive system of group representation. The progress of this experiment will be watched closely by all concerned in museum management.

These examples of museum statecraft are, of course, taken more or less at random for the sake of illustration. During the last twenty-five years, museums throughout the country have been built and maintained largely by the exercise of social skill of this character. The stories of the American Museum of Natural History, the Museum of the City of New York, and the New York Museum of Science and Industry alone would provide a textbook of responsible educational leadership on the part of trustees and officials as valuable to our common culture as much of the leadership in business and politics. Such a textbook ought to be written, and the rules, practices, and accomplishments of museum statecraft made known to all officials and to the general public. The achievements in this field are honorable and useful to the state; they form the groundwork necessary to the full conception of adult education in a democracy. Until

the people are given social leadership to help them unite in a representative body taking part in museum affairs, popular education through museum facilities must remain visionary. Education, like popular government, requires organization, representation, leadership, and constant technical management.

A general acceptance of the responsibility of museum trustees and officials for the nature of community relationships would be a healthy development. The myth of the corporate museum, existing as an aloof entity serving the will of some departed founder, is generally a piece of legal humbug covering up the ineptitude of living men. There are very few museums in the country that have not definite legal and social responsibilities for community service. If there are any that deny this burden, their tax exemptions should be closely scrutinized by the proper authorities.

Where the public interest is concerned, little distinction need be drawn between the various categories of museums—public museums and private museums, large museums and small museums, museums of science, of history, of art, of industry, of ethnology; the obligation of social service is the principal reason for their existence. An exception might be made in the case of college museums which are dependents of an artificial society, the academic microcosm within the political macrocosm. Otherwise, the social and economic ties that bind every kind of museum foundation to the body politic are too strong and too close to permit true independence. The nature of the public interest in institutions of different character varies naturally within wide limits. Some museums, such as the enterprising Museum of Art at Toledo, are as much a part of the social life of their cities as public parks or school playgrounds. Others, of the type of the

University Museum of the University of Pennsylvania at Philadelphia, provide research facilities that affect the public indirectly. Still others combine research services with educational aids and recreational activities. The essence of the matter is that the work is being carried out neither for private profit nor for the benefit of an imaginary class of scholars but as a part of the functioning of a democratic society. In legal terms, museums are vested with a public interest.

In considering the question of how to make the theoretical claims of the public on museums effective, it is almost necessary to review the major theories of political democracy. The control of museums lies in practice in the hands of small bodies of men, trustees and professional curators, who are generally self-perpetuating. The legal and moral obligation that lies on these men to use their power strictly in the public interest is not easily enforced. From one point of view the museum is still a feudal structure possessing a cultural bailiwick where democracy's writ can not run; from another, it is regarded as an example of a transition stage between ideas of private ownership and state socialism. In both instances the question of political control is assumed to be of paramount importance. Institutions are considered to function as public bodies only when directly under the authority of elected officials. This narrow conception robs social democracy of a great part of its historical meaning and renders it a mere preliminary to autocratic political control over all elements of communal life. A wider outlook would recognize autonomous bodies as the true instruments of popular freedom and the encroachment of political power as an evil, necessary at times but always dangerous to democratic ideals.

Museum autonomy is necessary and healthy so long as the governing bodies recognize that they are an integral part of the public power, as responsible to the community as city councils themselves. The control of educational facilities is a form of social power that may be slighted as negligible in the economics-ridden culture of our modern cities. It is none the less true that pathways to the public mind and imagination are eagerly sought by many elements in commercial life. Advertising has become one of the major forces of social control, and this development is based on the understanding that the nature of popular taste and the degree of public enlightenment affect the practical operations of a democratic state. This lesson has been learned only too well by the dictatorships which have employed all the instruments of easy communication and mass education to subject the minds of their peoples to an inhuman servility.

The antidote to cunning misinformation by emotion-rousing posters and enslaving prejudices is honest science, popular symbolic art, and the growth of independent judgment. Museums are powerful visual instruments to bring these gifts to the public. Their control is no routine or honorary matter but a front-line job in the continuous struggle to preserve social freedom.

The cumbersome method of popular election is not desirable for the selection of trustees of a museum. Voters do not know the issues involved, nor could they be expected to choose men of the particular distinction required. There is no need to imitate political government in order to achieve social responsibility. Politics are merely one branch of communal service, and the organization of civic progress requires the enlistment of citizens who will contribute their talents only as independent volunteers.

The final choice of museum boards must generally remain in the hands of informal senates of responsible elders, men distinguished in the community for their success or wisdom. It is these elder statesmen who know intimately the characters of the candidates and can judge whether office-bearers are honestly performing their duties in the public interest. A community council, composed of representative men and women, would provide an excellent check on the appointment and activity of museum boards in cities of moderate size. One of the first steps necessary is to clear away the legal fiction that museum trustees are mere guardians of funds and endowments. They are, in fact, active governing bodies in a field of great social moment and should be openly recognized as such by every element in the community.

Another factor in the development of museums as instruments of social service is the professional body of museum scholars. The director, curators, and assistants form a trained body of expert public servants. The growth of the importance of their profession is a measure of the increasing usefulness of the museum in community life. The object of their life work is to contribute to communal understanding through research and exposition. Acting in this capacity, they are as closely bound to the public as are the members of the medical profession; they lack, however, the legal privileges granted the older profession and also a clear acknowledgment by the community of their semipublic status. Museum staffs are often confused with academic faculties and, accordingly, are presumed to live and work in a narrow world of their own making. This is an unfair judgment, as the members of the staff deal directly with the general public, either as teachers or research workers. The university professor, on the other hand, has his professional being in an

artificial society composed of selected students under discipline. His obligations to the community outside are indirect and may often be safely ignored altogether.

The myth of the specialist, devoted to the pursuit of pure science or fine art, is particularly harmful to the position the museum curator holds in the public eye. All research work, if properly conducted, results in benefits to definite groups of people through the exploration of fields of knowledge important to their interests. The difference between the museum scholar and the research expert in an industrial laboratory is that the latter is bound to work for specific, narrow interests. Museum research is conducted with the widest range of social values in view; scholarship and the public interest are here directly linked without the intervention of commercial intermediaries. It is regrettable that this aspect of the curatorial profession has not been dramatized a little more effectively for popular consumption.

The nature of a museum is essentially social and public, whatever may be its particular subject matter or the source of its endowment. The measure of its public usefulness is generally determined, however, by the social statesmanship of its governing body and by the educational strength of its technical staff in research activities and in the arts of exposition.

The Educational Function

EDUCATION is a broad term designed to cover a multitude of activities, and acceptance of educational responsibilities toward the general public does not commit an institution to any specific form of action. The major broadcasting companies, for example, have consistently claimed a place as agencies of public education. Their interpretation of this role ranges from the popularization of classical music to the broadcasting of news bulletins, dramatic commentaries, and political speeches. Museums suffer from the lack of definiteness attached to the educational function; they stand before the public as educational institutions, but the clients they serve and the type of instruction given are not clearly defined even by the institutions themselves.

The increasing pressure on museums to base their existence as public institutions on educational services is creating a situation where continued support has to be sought in terms of specific returns in popular learning. In a recent and perhaps too optimistic survey of North American museums written for British consumption, M. B. Hodge has summarized present conditions: "The American museum is conceived by its founders and governing authorities to be primarily a cultural and educational institution, and as such it has now a well-established and univer-

sally recognized place in the educational system of the country. To this fact it undoubtedly owes much of the financial support that it gets, and it can not be too strongly stressed that until the governing bodies and the curators of British museums generally realize this and develop a similar policy, they will have difficulty in getting the public support that is their due.

"The American museum uses every possible means of interesting the adult public in the institution."¹

Educational planning, then, is vital to the museum movement, whether in art, in science, in history, or in industry. At present, the bulk of the museums in the country may fairly be said to stand at the "cafeteria" stage in regard to popular learning. They offer, generally, a brilliant and rather bewildering miscellany of instructional objects and expect the general public to serve themselves by means at their own command. The place of lecturers, docents, and planned activities under competent instructors is incidental to the main work of the museum—that of collection, arrangement, and public display.

The question that must be asked is whether the basic principle of exhibition in terms of scientific or aesthetic classification is a sound means of promoting popular learning. It may be that these methods were inherited by the museums from the days when their clients were close-knit learned bodies. Their principles of exposition may be scholarly shorthand, illuminating to the initiate but far from clear to the untrained multitude they seek to influence.

As a means of comparison with the more settled educational philosophy of long-established natural history and art museums,

¹ M. B. Hodge, "Museums of North America." *The Museums Journal*, 38: 85-104, May, 1938.

some of the recent experiments on the part of historical societies and museums of science and industry are of interest. The Chicago Historical Society possesses a modern building devoted almost solely to popular learning. The collections of relics and manuscripts are arranged to provide a chronological synopsis of American history in simple dramatic terms. The casual visitor may enter the exhibition halls with the most elementary knowledge of the history of his own country and still find the dramatic presentations well within the range of his understanding. Material assembled by scholars is here displayed so as to convey its inherent meaning to the most ill-prepared citizen. The French Exploration Room and the George Washington Room, for example, contain material that is normally confined to the understanding of students with special preparation. The art of display has related this material to commonly known facts with sufficient skill to render it completely self-explanatory.

The educational results of a museum of this character might be said to deepen existing knowledge rather than to open up new unexplored fields to the visitor. The limitations of visual education, however, tend to make it an instrument of dramatic stimulation rather than a substitute for serious study. It is impossible to guess the effects of synoptic history on the hundred thousand visitors who view the compact exhibits of the Chicago Society every year; yet it may be assumed that those persons capable of an imaginative grasp of their country's history have received at least a stimulus to future study in the serious literature of that field. The power to synthesize basic facts into a dramatic unity is perhaps the strongest feature of the visual method.

In a field perhaps less obviously popular, the Henry E. Huntington Library and Art Gallery of California has experimented

with educational techniques along similar lines. Robert O. Shad, the Director of Exhibitions, has had an embarrassing wealth of scholarly material in rare manuscripts and books from which to draw for display. The exhibition facilities of the Library are comparatively slight, and the location of the building makes it relatively inaccessible to casual visitors. The problem of display requires an acute analysis of the type of potential visitor and also an understanding of how erudite material can be made to convey a direct message to the untrained mind.

In three recent exhibitions, the scholarly resources of the Library were combined with exhibition technique to provide concrete contributions to popular education. The display of selected manuscripts illustrating the formation of the Constitution was accompanied by a booklet prepared by Max Farrand, the Director of Research of the Library. The manuscripts illustrating the history of Los Angeles between 1850-70 were explained by a historian of California, R. G. Cleland, and the Library's excellent collection of Byron papers was discussed in a booklet by Ricardo Quintana of the University of Wisconsin. These three booklets, each less than twenty pages in length, are models of simple exposition, bringing to life the significance of the material displayed. They form introductions to the broad subjects of the Constitution, state history, and nineteenth century English poetry in a manner almost impossible for the ordinary adult to obtain in any other way. Through these exhibitions scholarship was given a means of explaining to a general audience the use of its own proper tools, namely, original manuscripts.

Techniques of this nature may be considered limited to the exposition of social and literary history, subjects easily compre-

hended by any one who has had an elementary school education. It is doubtful, however, whether it is the simplicity of the subject or the skill of the exhibitor that makes one or two of the more modern history museums, such as the Historical Society of Chicago or the Museum of the City of New York, leaders in the field of visual education.

These institutions, because of their comparative modernity and the decorative character of their collections, are naturally more flexible instruments for educational purposes than long-established museums housing large quantities of scientific material accumulated over many decades. They can also beguile the public eye more readily than many costly art collections since they possess the great virtue of dramatic coherence—the grouping of objects around a simple story familiar to almost every beholder. Nevertheless, the major reason for the educational effectiveness of these institutions lies in the fact that they have been organized strictly for the purpose of disseminating information to the untrained public through the art of exhibition. There is little reason to believe that museums concerned with arts and sciences could not equal or surpass the success of the historical museums if an educational philosophy of a clear-cut nature were adopted.

In proof of this it might be pointed out that the new museums of science and industry in Chicago, in New York, and in Philadelphia are providing for public consumption bold leadership in the explanation of scientific principles. Modern technology is certainly no easier to understand than the older sciences, nor is it inherently more interesting to the normal citizen than biology or ethnology. The definite purpose of these recent institutions to make every effort to provide exhibits that will meet

with popular understanding, together with an intense desire to inform, lies at the back of their educational ingenuity. As they are of recent growth and are sometimes painfully experimental it is perhaps unfair to compare them with institutions devoted primarily to scientific collection and classification. It is true that they sometimes lack dignity, display for sheer love of displaying and perhaps, through oversimplification, even mislead the public as to basic facts. Trial and error are, however, necessary in this new field of education, and the fact remains that these infant institutions have steered a direct course to the public imagination. It might be expected that older foundations, harboring scholars of distinguished reputation, would be able to achieve similar ends with less danger of overstepping the bounds of scientific certainty.

In terms of practical success the Milwaukee Public Museum exemplifies the triumph of the exposition museum. Dioramas in all departments attest the belief of the staff in this form of education. The Museum is entirely supported by tax money and naturally depends on the favor of the people of the city for its continued growth. The annual attendance is calculated at 1,500,000 in a community with a residential population of 700,000. Museum lecture halls are overcrowded, and the rooms in which other activities are held are filled to capacity. The institution deals with state history, natural history and science, geology, technology, and several other fields. By many standards the program is too comprehensive for its limited funds, collections, and trained staff; its displays accordingly lack many of the finer points to be found in other museums. The strength of the institution lies in the wholehearted manner in which it has devoted itself to popular education, laboring to make each sub-

ject as clear and interesting as possible to the untrained visitor. Samuel A. Barrett, the veteran Director, has reduced each of the complex halls to a state of comprehensibility that delights the constant stream of visitors. Dr. Barrett has carried his philosophy of the synthesis of knowledge to a point that some scholars might disapprove but which in practice certainly attracts and informs the public.

It is only fair to state that a thoroughly popular museum such as the Milwaukee institution, covering a wide field of subjects, achieves its educational ends by reason of the sacrifice of some of the other potential functions of a museum. The activities of the staff in research work are unquestionably limited by their constant preoccupation with exhibition halls. Apart from the question as to whether the city taxpayers would have the patience to finance a long-term program of research that might bear no immediate results in public welfare, the decision of the Director has been deliberate. Popular education of a certain character seemed desirable, and he consciously planned for this purpose over a long period. There is no need to assume that other forms of education, including intensive research work, are not equally necessary for a well-rounded museum movement. The success of the Milwaukee Museum lies not so much in the specific character of its educational offerings as in the clarity of purpose with which its aims have been pursued over a considerable period of time.

The ability of a museum to fulfill its complete responsibilities in a community depends to a considerable extent on the selection of concrete educational objectives on the part of its executive officers. Particular aims are influenced, of course, by the

nature of the community and the resources of the museum. Once determined, they permit a degree of specialization essential to the healthy development of any institution. The types of social activities open to museums are varied and have been well described by Paul Rea in the following passage:

We shall avoid much confusion if we bear constantly in mind that museums have multiple functions. The mere preservation of collections of significant objects is a potential social service apart from any use that may be made of them at this time. We may have little enthusiasm for potential future values, but we must grant that to preserve from destruction masterpieces of art, the vanishing faunas of our time, or objects characteristic of our own or previous cultures, even though it were in a vault with a time lock set for a thousand years, would be a potential service. Tutankhamun's tomb proves this. Fortunately, however, the museum function of acquisition and preservation is not incompatible with service to our own generation. This service may be either to advance knowledge or diffuse knowledge. These functions are closely related but different. A museum may devote itself to the advancement of knowledge with no concern for the diffusion of knowledge beyond bringing it to the attention of scholars. The advancement of knowledge is accomplished by research and technical publication, and a museum which performs these functions is of great social value. It does not, however, accomplish all that we mean by education. The educational function of museums, as we ordinarily conceive it, is concerned with the wide diffusion of knowledge. . . . To sum up, then, museums have three important functions: the acquisition and preservation of objects, the advancement of knowledge by the study of objects, and the diffusion of knowledge for the enrichment of the life of the people.²

From the viewpoint of the community the final process of the dissemination of already digested knowledge is of primary importance. The ordinary citizen is dominated by the spirit of

² Paul M. Rea, "What Are Museums For?" *Journal of Adult Education*, 2: 265-271, June, 1930.

"here and now," by a desire for immediacy in the use and enjoyment of intellectual goods. In consequence, direct public support is attracted to institutions providing a generous contribution to the needs of popular learning. This factor has to be taken into account by the controlling authorities of museums. To the extent that their institution is dependent on direct public benevolence they must concern themselves with the exposition of established knowledge rather than with the slow accumulation of new data.

As far as the process of education, viewed as a philosophic whole is concerned, it would be difficult to evaluate the importance of the three aspects of museum work. There can obviously be no true learning without, at some period, the patient collection of data. Facts or objects are again useless until they have been submitted to the processes of classification and synthesis. It is only after the completion of these stages that the task of spreading information can be safely undertaken. The process of adding to the totality of human understanding is in truth indivisible; the separation of function is not based on the nature of learning itself but on more practical questions of the division of labor in modern society.

The problem of choice between several potential activities, presenting itself to every museum, is then primarily a social problem. How far can the institution depend on the social environment in which it finds itself for support in collection, research, or exposition, respectively? A nice judgment is required on the part of the museum authorities, and the accuracy of their analysis of potential support determines the ability of the museum to pursue its chosen educational services.

Attempts are sometimes made to create suitable environ-

ments in terms of financial and social support for specific types of museum work through modern devices of publicity. The public relations counselor has worked sufficient wonders in the field of commerce to tempt museums into seeking his peculiar talents to aid them in attracting public support to their particular brand of education. Intelligent publicity has generally been neglected in the past by museums, and it would be wrong to undervalue any sincere efforts to correct this defect. Criticism, however, may be directed at the conception that wide publicity is a cure-all for public indifference.

It is the preliminary step of estimating community support for any specific type of education that has up to the present time been approached in a somewhat unbusinesslike manner by the majority of museums. Until this elementary analysis has been attempted, the assistance of public relations counselors will always contain an undesirable element of gambling. The failure of museums to plan social foundations for their educational programs has been partly due to the lack of theoretical material on the relationship between the structure of a community and its educational needs outside the formal school systems. Museum authorities have had to undertake practical pioneering in a field that has never been clearly bounded by professional educators.

A practical examination of the three functions of a museum discloses that each of these educational stages appeals to roughly one segment of the social hierarchy. The acquisition of objects, for example, whether of artistic or of scientific value, lies within the sphere of the wealthy patron, trained by life in the sport of acquisition and possessing the means to gratify his tastes in the world of culture. This self-evident fact has affected the develop-

ment of museums since the fabled collections of Alexandria in the Hellenistic epoch. The cabinets of curiosities and the rich treasures gathered by the medieval princes of the Church and by the lords of secular society still have their prototypes in museums today. The art of collecting is unquestionably an educational necessity and should be encouraged wherever possible.

Trained scholars have nowadays led the rich patron away from crass errors of judgment and have made his contributions count most effectively in the growth of human knowledge. Museums fortunate enough to find the element of moneyed patronage present in their communities would be negligent if they failed to develop their collecting function to its utmost capacity. There is little reason why the support of a minority social class along the lines of its own interest should inhibit other activities of the museum, based on the interests of different social groups. It is obvious common sense that the better the collection the more uses can be made of it in research and in display.

Two medium-sized cities—Columbus, Ohio, and Milwaukee, Wisconsin—may be used to illustrate the effect of wealthy patronage on the cultural fortunes of a community. The state capital of Ohio, with a population of about three hundred thousand, possesses the Columbus Gallery of Fine Arts built by private subscription at a cost of approximately sixty-five thousand dollars. In practice, a small group of twenty or more families provided the incentive for the raising of the necessary funds. The bulk of the permanent collection consists of the acquisitions of the late Ferdinand Howald in the field of twentieth century art. The modern works gathered in this manner are of considerable importance and certainly could have come to Columbus only through the efforts of a private benefactor. Housing this collec-

tion perhaps tends to overcrowd the museum's exhibition halls to the detriment of a well-balanced display for educational purposes. This, however, is a very minor drawback and one which can not offset the possession of materials that place Columbus in the forefront of cities of similar size in the field of education in modern art.

In contrast to Columbus, which is cited as a community where individual patronage has played a normal and far from exaggerated role, the prosperous city of Milwaukee suffers from a virtual dearth of public-spirited art lovers. The Milwaukee Art Institute has an interesting history stretching back to the German Panorama painters. In so far as activities and eager service are concerned, the Institute under its present Director, Alfred G. Pelikan, has rendered many benefits to the community. Cultural materials, in the way of representative paintings, as well as adequate buildings and sufficient finances are, however, conspicuously missing. For some mysterious reason the great merchants of Milwaukee either have lacked aesthetic interest for some generations or have indulged in unsocial hoarding of their acquisitions. The Layton Art Gallery, as the one exception, is still below the cultural deserts of Milwaukee both in regard to the objects exhibited and the care which the trustees take of their building.

The artistic barrenness of Milwaukee contradicts the apparent character of the community, a city of cultured people, where great wealth has been accumulated over several generations. The interest of the inhabitants in good music and the presence of a flourishing school of painters in the region would indicate that there is considerable demand for opportunities for aesthetic appreciation. This demand has no means of being satisfied with-

out the cooperation of men of wealth interested in acquiring rare objects of art for the pleasure of the pursuit. The weakness of Milwaukee in the field of art in contrast with a city half its size illustrates the fact that educational instruments reflect the nature of the social hierarchy in power. When one segment of the social pyramid fails to fulfill its proper role, the numbers and enthusiasm of persons that constitute the other segments can hardly compensate for the lack.

The second educational task of museums listed by Mr. Rea—the advancement of knowledge by the study of objects—lies within the field of scholarly research. There is an ancient tradition that scholars form a self-contained body in the community, sustaining and encouraging each other; communicating with each other in their own special languages; and, finally, with a gesture of Olympian detachment, showering as free benevolences the results of their unworldly labors on an undeserving public. The roots of this belief go back into medieval times when learned men were in general part of the international brotherhood of the Church. In those days they were content, in the light of their faith, to live in simplicity and poverty. Intellectual labor was generally along abstract and metaphysical lines and did not require the environment of costly laboratories for the fruition of thought. Mother Church fed her learned children by a system of indirect taxation that preserved the scholar from distracting contact with social economics.

The cloak of unworldly scholarship has now worn rather threadbare, though it is still maintained through the wealth of great universities and the generosity of some men of fortune. We have not yet reached the stage of the Union of Soviet Social-

ist Republics, where men of learning have been conscripted into the social machine with careless and often stupid brutality. Nevertheless, the pretense of an independent world of scholarship is an expensive fiction for institutions to maintain even in the United States. The economic support available for the pursuit of what is described as "pure research" is limited, and the profession of scholarship can not expand beyond the bounds set by the iron law of subsistence wages. Museums must recognize that their plans for this type of educational service must be based on existing and prospective support for this specific purpose.

Endowment funds provide the major source for the execution of research plans in American museums. Resources of this type represent the accumulated interest of a small section of the social hierarchy, which has indulged its intellectual curiosity vicariously through possession of economic power. Complete dependence on this form of patronage would keep essential research activities in museums at a pitifully low level. Each generation would be living off the capital of its predecessors in this respect. A well-balanced program of museum research requires the active aid of all the special elements in the community that can be drawn to the accomplishment of definite tasks in the immediate present. Metropolitan museums are, in general, best fitted to undertake this form of education on a wide scale because their environment affords them greater opportunities to discover the needed support. The American Museum of Natural History in New York and the Field Museum of Natural History in Chicago finance important research programs through enlisting continuous support from selected groups in their communities.

In order to place research on a broader foundation than that

afforded by surplus endowment and the accidental interest of wealthy amateurs, a sober estimate must be made of the elements in a community capable of recognizing the value of scholarly research. Professional groups concerned with medicine, engineering, chemistry, and the major technical aspects of modern life would seem the most logical supporters of long-term programs. These associations, unfortunately, lack financial power to implement their interests in this field. They are also, as a rule, rather narrowly concerned with the protection and advancement of the social and legal aspects of their members' callings.

Museums have the difficult responsibility of devising means whereby professional groups could take official cognizance of research work touching on their respective fields. An enlargement of the long-established academies of sciences, such as those of New York and Philadelphia, might help to meet this situation. Besides the individual membership of interested persons, group memberships by professional bodies could be sought. The meetings of the various divisions of these academies provide a framework for the discussion of research projects and findings before a competent audience. Even though the professional groups themselves are unable to supply the necessary financial backing, their endorsement of the work in progress would open up new avenues to public and private financing.

A satisfactory link-up between museum scholars and the active practitioners of the scientific arts would presuppose a strong desire by both elements to bring about a more general understanding of the objectives of science on the part of the public. Criticism has been leveled in the past and may still be leveled against the indifference of museum curators to the social impli-

cations of their work. Frederick P. Keppel described this handicap to the spread of learning in incisive terms:

Another liability is the traditional attitude of so many men of science, the very men who should be the leaders, not only in the advancement but in the diffusion of knowledge. It would be too much to say that they regard themselves as the High Priests of Mysteries in which the *vulgus profanum* has no place, though this cruel thought does sometimes come to one's mind. It would not, however, be unfair to say that most of those who are themselves advancing the frontiers of scientific knowledge are frankly not interested in the popular diffusion of such knowledge. When approached upon the subject, they are likely to reveal a fear that if it were known by their scientific colleagues that they were developing such an interest, they would lose face, and this despite excellent examples to the contrary to be found in England and elsewhere.³

Before the research activities of museums receive their proper share of attention as instruments of popular learning, museum management must discover the means of interpreting the work of its scholars to a practical-minded public. The conscription of professional groups to act as intermediaries seems to offer the most hope of permanent success. The persuasion of professional associations to enlarge their purposes to include the support and interpretation of scholarly research would constitute no small feat of social engineering. Directors of great museums and the trustees of these institutions, however, have often proved themselves in the past to be energetic promoters and organizers of considerable pertinacity.

The final category of museum work, the dissemination of knowledge to the widest possible public, lies more strictly with-

³ Frederick P. Keppel, "The Lag in Adult Education in Science." *The Museum News*, 14: 6-7, April 15, 1937.

in the field of what is described as adult education. In this case, support has to be obtained from the majority groups in the community. In pleasing the public, it is not always possible to follow educational procedures faithfully, and museums that submit wholly to the dictates of the many may find themselves competing with the penny arcade. Educational planning in terms of the social environment is not merely the effort to obtain the maximum support that a given community can render, but also an attempt to seek this support for true educational ends. The relationship to each other of the three activities—collecting, research, and exposition of knowledge—may sometimes determine whether an institution has the right to call itself by the honorable name of museum.

Art and Culture

WHEN an American Lecky appears to write a history of morals for his native country, he will find much relevant material in the comparative growth of different types of museums. Why, during the second and third decades of the twentieth century, did museums of art rise to notable predominance over institutions devoted to science or history? No great creative outburst marking this period compelled the nation to house the overflow of its artistic genius in an abundance of museum buildings. In strict fact the bulk of the material acquired for public display was obtained from the rival civilizations of Europe and Asia.

The social historian of the future will be able to spin many theories from this eager reaching out toward alien art forms. Perhaps an Alexandrian epoch of cultural imperialism was thus foreshadowed—the first stirrings of a powerful people outgrowing their native resources and ready to reach outside their own borders for the sustenance of growth. On the other hand, prophets of decline may find in these unnoticed events omens of the end of a historic culture. Science and history were the tools of national expansion on the American continent. The number and vigor of the museums devoted to their service marked the

power of the old tradition. Art, on the contrary—particularly borrowed art—is surely a sign of a slackening of national energies; of a tendency to enjoy the fruits of civilization from whatever source they come instead of building painfully for the future from the stubborn native soil.

The fact remains that by the year 1930, there were one hundred and sixty-seven museums of art¹ in the United States as compared to one hundred and twenty-five science museums.² The approximate aggregate of annual incomes for art museums amounted to \$7,394,000, as compared to \$4,796,000 for science and \$919,000 for history museums. Numerically, history museums must be given first place, with a total of four hundred and fifteen institutions. In importance, however, as measured in terms of income, the value of their buildings, and numerical attendance they rank well below both art and science museums. The establishment of numerous historic houses as museum memorials has greatly increased the quantitative spread of the historical museum within the last decade.

The sixty new art museums founded between 1921 and 1929 are symptoms of some strong tendency in the development of national culture. The value of their buildings alone represented the expenditure of nearly \$17,000,000, though over \$13,000,000 of this sum was concentrated on the imposing structure of the Philadelphia Museum of Art. A partial explanation of the development is to be found in the vast sums of money required to obtain masterpieces from abroad and to house them adequately

¹ The count in 1938, according to *Fortune* magazine, was 201. See "The Pied Piper of Toledo." *Fortune*, 17: 69-76, January, 1938.

² Laurence Vail Coleman, "Recent Progress and Condition of Museums." *Biennial Survey of Education in the United States, 1928-30*, p. 6. United States Government Printing Office, 1932.

in American surroundings. It was a period in our history when it seemed fashionable to import palaces and their furnishings both for private and public use. Obviously, a tendency of this character could not be described as a popular movement in the narrow sense of the term. A small minority, albeit a very powerful one in the social life of the country, carried the burden of the task of forming collections.

Art can not be admired without being seen, and the role of surplus wealth in stocking America with aesthetic treasures has been of vital importance. European peoples can build their culture on the accumulated bequests of their talented ancestors. American aesthetic culture has to be synthesized out of the ancestral dollar. There is no reason to believe that this sensible division of labor, whereby the millionaire minority purchases artistic objects for popular enjoyment, is in any way harmful to the growth of democratic culture. On the contrary, it would appear to illustrate the healthy unity of society: the activities of one segment are bound to affect all the others. Wealth spent in the acquisition of art objects is almost invariably wealth expended for popular education in aesthetic values. It has become practically a rule that private collections can be withheld from the public for no more than one generation. Inheritance taxes have of course given point to this principle. The recent gift to the nation of the Mellon collection, the probable fate of the J. P. Morgan collection, and the bestowal on the public of the Frick collection, well housed and comfortably endowed by its original owner, are indicative of a trend.

It might be said, following Thorstein Veblen, that America has obtained her materials for art appreciation through the passion of the rich for conspicuous expenditure. The only point to

such a slur would be to cast doubt on the taste and judgment which have gone to the furnishing of the people's galleries. As a matter of fact, privately made collections generally have proved to be of a high standard. There are few critics who would care to cavil at the taste of John D. Rockefeller, Jr., as displayed in the medieval treasures he has donated to the Cloisters branch of the Metropolitan Museum of Art. As far as the untrained public is concerned, there is little difference between the judgment of the wealthy amateur and the professional art expert. Both are fallible and occasionally overprecious.

Once the art museum has been founded, endowed, and properly stocked with objects, the interest of the wealthy minority in a community tends to fade. From this point the responsibility for the promotion of culture falls on the shoulders of other classes. It would be safe to say that this stage has already been reached in a majority of communities of sufficient size to support collections of art objects. Exceptions still exist and perhaps should not be ignored. Los Angeles provides probably the most notable example of a major American city denying her residents the elements of art appreciation. The art gallery most accessible to this community of almost 1,500,000 is the very personal and static collection of the late Henry E. Huntington in San Marino, a considerable number of miles from the heart of the city. The case of Los Angeles is more outstanding than that of Milwaukee discussed in the previous chapter. While San Francisco set a generous example, with artistic collections housed in three somewhat redundant galleries, her rival in the South has not yet been moved to challenge this superiority. In Los Angeles, community wealth passing through the hands of a small promotional group still exhausts itself in further promotion. This situation is to be

contrasted with a city like Detroit which has matched its mushroom growth with an equal measure of cultural pride, developing with the aid of its older elements, as they profited in wealth and power, one of the best-balanced art museums in the country.

When the slow growth of artistic culture in Europe is considered—the centuries that were needed to accumulate representative objects, the tenacity with which people clung to traditional art forms, and the blithe ignorance of foreign styles on the part of all but a negligible minority—American achievements in the spread of universal art values within the brief space of fifty years seem almost incredible. Yet the cultural tempo on these shores is so rapid and the national character so impatient that strong criticism has been leveled at art museums for failure to convert a hundred and twenty million people into a trained aesthetic audience in less than a single generation. No institution can meet the standards demanded by so myopic a time sense. Time is an essential factor in popular education and deserves a place in the blueprints of cultural planning. Perhaps museums should be built as medieval cathedrals were raised, leisurely, in accordance with the needs of the community, apse and nave, chapter and spires being added piecemeal as use and wont developed among the faithful. The fact that they appear suddenly in a locality, planned, constructed, and furnished by outside experts, shocks community tradition. By American standards the building is already old before an organization has developed to make its influence felt in the social pattern of living.

The cure for this state of affairs is not to demolish art museums as obsolete relics, as some hotheads advocate, but to exercise reasonable patience in making their offerings a matter of public usage. A period of experiment, of considered planning, and of

deliberate social engineering can not be avoided between the founding of the museum and its complete fusion with the customary life of the community. Educational theories are really the search for means by which the aesthetic value of the museum can be naturalized most readily in the traditional outlook of the locality. When true folk art exists, as among some older peoples, it endures as a traditional habit, transmitted from generation to generation through the unconscious faculty for imitation. Museum art offers higher standards than folk art, but the community must make a correspondingly greater effort to incorporate them into customary taste.

The essential nature of art museums as creators of new standards rather than as mere transmitters of habitual culture was well expressed by Benjamin Ives Gilman when he wrote, "The true conception of an art museum is not that of an educational institution having art for its teaching material, but that of an artistic institution with educational uses and demands."³ A museum's first duty, then, is to create essentially new standards of excellence for its community through its collections and their skillful arrangement. It is only when this has been accomplished that the task must be faced of persuading the public to accept these standards for their own.

In general, it may be said that the principles of popular education in art appreciation are in a somewhat chaotic state throughout the museum world. There are few historical precedents to serve as examples of how a great industrial society may be introduced to alien art forms. The philosophers have been

³ Benjamin Ives Gilman, *Museum Ideals of Purpose and Method*, p. 98. Cambridge: Riverside, 1918.

fervid on the subject, but their somewhat contradictory theories of what art should mean to the modern citizen are not sufficiently detailed to serve as guides for educational programs in actual localities.⁴ As America is still controlled by the active rather than the reflective type of intellect, a healthy pragmatism has marked the general approach to this problem throughout the museum world. Various types of experiments have been carried out over a course of several years, and the results of practical endeavor have been used as general canons of judgment.

For the sake of convenience, it may be possible to classify these experiments in accordance with whether they aim at an intensive or an extensive approach to the question of educating public taste. This classification, though useful enough for practical purposes, is essentially superficial. In both cases the objective is the same—the widest possible spread of aesthetic values. The conception of an intensive or extensive plan is merely one of method, of differing stages in a common process.

Where the intensive approach is used, the improvement of the artistic standards of the community is attempted through the careful education of selected groups composed of people who are in a position to act as social leaders. The normal functioning of American society is presumed to operate in such a way that the cultural standards of an economically powerful elite will sooner or later become the model for the rest of the community. The laws of imitation and prestige lend considerable support to this contention, which has lately been used by sociologists of the school of Pareto to explain the development of many cultural patterns in social life.

⁴ Of the recent philosophic and semiphilosophic literature in the field, the author suggests, for the purpose of sampling, *Civilization* by Clive Bell, *Art as Experience* by John Dewey, and *Essays on Art* by A. Clutton Brock.

The extensive method consists in creating equal opportunities for all on the assumption that a democratic society produces customers for aesthetic education capable of receiving direct inspiration without intervention of any social machinery based on class or wealth. In practice, this method requires a museum to simplify its instruction both with regard to the time required for the mastering of artistic standards and the intellectual effort needed for initial understanding. A simple lure is the most practical one for the fisherman who seeks to catch every variety of fish with a single hook.

During recent years several interesting experiments have been carried out in the intensive approach to art appreciation in different parts of the country. Perhaps one of the most painstaking and thorough of these projects is that of the Cincinnati Art Museum, planned and executed by the Museum's director, Walter H. Siple. The basis of the plan was a three-year course for adults in art appreciation, consisting of twenty-four two-hour meetings throughout each year. A grant made by the Carnegie Corporation of New York met some of the expenses of the experiment. The ambitious nature of the courses, covering three years' continuous study, made it possible to train the participants honestly and thoroughly in the principles of aesthetic values. It is obvious that an experiment of this nature could affect directly only a minor portion of the adult residents of Cincinnati, a city approaching the half-million mark in population. A deliberate choice was made to concentrate on the proper training of a selected group and to study the results that this nucleus of leaders might have on the community in terms of increased public interest in the Museum and of a general raising of aesthetic standards in common social undertakings.

The first notable fact is the number of people who proved willing to undertake a serious course of study and to continue it with growing enthusiasm over a period of three years. Approximately six hundred adults have enlisted in these studies. During 1938 there were three hundred students in the third year of their work and two hundred in the second year. Considering the practical limitations of time and place, these numbers indicate that there is an unexpectedly large demand for aesthetic training on the part of mature people in cities of moderate size. Even with the wise selection of evening hours between seven and nine o'clock for the holding of classes in the first and second years of study, the time factor must limit the opportunities of this course to a leisured group. The preparation of the evening meal and the care of the family act as barriers to many adults who might wish to take advantage of this form of training. The location of the Museum in Eden Park adds an obstacle of space, negligible to those accustomed to driving their personal automobile, but serious enough to members of families with a single car for group use or dependent on street cars for transportation purposes. The annual fee of ten dollars charged for the course does not cover the expenses incurred by the Museum, yet it is sufficient to deplete seriously the amusement budgets of many persons. In general, the obstacles of time, distance, and cash limit the potential student body for this experiment to an upper segment of society that has leisure and money. Among this group only the intellectually eager members are willing to submit to the discipline of a time- and energy-consuming course of study lasting over a period of three years. Through this inevitable process of selection the student body becomes representative of the potential leaders of the community in the economic and cultural fields.

The absence of a just proportion of men in this undertaking is probably a consequence of American mores. In this country, as contrasted with Europe, leisure devoted to intellectual or artistic pursuits is accounted inimical to the growth of manly qualities. The American male, in general, is well domesticated. His artistic sensibilities are rooted in the idea of the home and its decoration. In consequence, he is apt to feel that art appreciation is a sphere properly reserved to womankind, and as mildly eccentric a pastime for the average man as cooking or knitting. This casual illogic is not likely to remain a permanent feature of our culture. In time the American man may become as proud of his aesthetic taste as is the Frenchman of his understanding of a good cuisine or the rugged Highlander of his ability to knit stockings.

The results of training special missionaries of aesthetic culture in a city like Cincinnati can not be estimated except in terms of several decades of civic life. Time is required before the influence of individuals can make itself felt throughout the wide ramifications of community life. There are also too many possible avenues through which a special type of training and enthusiasm on the part of the few might affect the life of the many to make feasible a statistical analysis of the lasting results of the experiment.

In the narrow field of public interest in the Museum itself, however, definite results can be traced to the adult education courses, even in the brief space of three years. Membership in the Museum, according to the director, is ceasing to be merely a matter of civic pride and duty and is becoming a question of enjoying cultural privileges in return for a subscription fee of ten dollars a year. The creation of special activities for members has

been based on the lessons learned in the conduct of the intensive adult education courses, which have served as practical interest finders for the fifteen hundred contributing members. In consequence, members' activities include unusual features, such as weaving classes and courses in the problems of interior decoration, as well as the more customary opportunities to study sketching and modeling in clay.

A particularly interesting development in the Cincinnati Museum during the year 1938 was a well-attended series of five recitals on the art of the dance, covering the field from the classical ballet to the dance of the American Indian. This type of program is not confined to the Cincinnati Museum; it has met with considerable success elsewhere, notably in the Brooklyn Museum. It is, however, difficult to organize a representative series of dance recitals outside a metropolitan area. The ability of Cincinnati to present this program is evidence of the unusual measure of support given the Art Museum by residents in the higher economic and cultural brackets. This interest may be traced in good part to gratitude for the intensive art appreciation courses conducted by the Director. The general effect of the experiment has been to give the Museum the role of a House of Culture, to borrow a phrase from A. C. Sewter of the Leicester Art Gallery.⁵ A definite though limited number of persons have come to look upon the Art Museum as an authoritative center for advice and training on practical questions of aesthetics affecting their personal lives and also the affairs of the community.

The ultimate value of art appreciation courses must depend not only on the number and character of students they attract

⁵ A. C. Sewter, "Contemporary Art and the Museum." *The Museums Journal*, 37: 155-59, July, 1937.

but also on the essential soundness of the training given. Mr. Siple states that the objectives of the Cincinnati course "are to encourage people to observe works of art with some understanding of the means used by the artists to attain their ends and to develop critical standards for forming an estimate of quality." The first year of the course consists of an intensive study of the fundamental principles underlying art as demonstrated in drawing, painting, sculpture, architecture, and the decorative arts. The second year is devoted to a discussion and study of good, bad, and indifferent taste and to materials used by the artist in different fields and the techniques whereby he shapes these materials into works of art. The third year deals with a historical outline of art. The advantage of holding such a course in a museum, Mr. Siple believes, is that the students have an opportunity to work with original objects.

Judgment of the technical methods of instruction used by Mr. Siple and his staff must be left to his colleagues in the field of art education. A layman may feel entitled to assume that three years' study in a well-equipped museum under an acknowledged art scholar will result in at least an introductory understanding of some forms of art. The important question at issue, however, is not the competence of the instruction, which may be taken for granted, but the exact nature of the field in which instruction is being given. The Cincinnati course is aimed at appreciation of the arts and not at the acquisition of technical virtuosity. In this sense, then, it ranks as liberal education in contrast to technical training for vocational or hobby purposes. From another point of view, the field may be more limited as the instruction may point to the understanding of mere processes, historical and technical, through which certain types of fine arts have been

produced in the past. For example, a knowledge of the details of the craft of pottery or even of the processes of painting in tempera or oils does not necessarily lead to a comprehension of general aesthetic values.

The objectives of the Cincinnati course are clearly intended to be an enhancement of artistic understanding in every field of practical life. Whether the particular means adopted in Cincinnati or the material available in any museum would suffice to achieve this end is a question the layman is not competent to answer. Artistic values are native to so many common essentials of American life that it is difficult to know whether public education in aesthetics should start with Italian primitives or functional ash cans.

The matter is one for educational pundits to argue in professional conclave before the general public is called upon to accept considered conclusions. The duty of art museums, however, is clear. They are the custodians and defenders of the fine arts and are expected to experiment with their use in popular education to the fullest extent practical. If the warps in civilization decree that they must eventually succumb to the triumphant ash can—the modern Diana of the Ephesians—public opinion expects that at least they will go down fighting. It remains possible that traditional values are sound even in an industrial democracy and that, given time, the public may learn about art through art. In the meantime, Cincinnati can at least boast of carrying on an experiment in a great tradition.

The question of cost to some extent prevents the general adoption of Cincinnati's methods by museums of similar size and circumstance. Experiments are needed to establish preliminary facts in the field of art appreciation for adults, and the results of

the Cincinnati plan can be used as building blocks by art museums throughout the country to create educational programs in accordance with their resources and special community problems. A series of facts are of greater moment to popular aesthetic education at the present time than any theoretical plans.

Considerable difference exists between the educational techniques that can be adopted in art museums situated in great metropolitan centers and the work that is practical for the great majority of institutions in cities of average size. This distinction is not merely quantitative—a question of the size of the educational budget and the physical facilities of the museum—but also qualitative. New York, Chicago, Philadelphia, and Boston are not simply large cities but communities with the peculiar social structure characterized as metropolitan. In terms of cultural organization they lack the homogeneity of cities like Cleveland, Milwaukee, or St. Louis. Metropolitan areas tend to shelter groups of divergent character, insulated against the pressures of the community spirit. As far as aesthetic values are concerned, a metropolis generally contains one or more groups of highly trained and sensitized residents. In contrast to normal city life, however, the influence of these metropolitan groups on the rest of the community is often negligible. They live and have their being content in their limited society of taste, remaining comparatively free from the social responsibilities that press on citizens of smaller, homogeneous communities. These factors prevent metropolitan museums of art from exercising a wide influence over the community through intensive education of the natural leaders in cultural affairs.

The criticism that may be directed at the educational machin-

ery of the Metropolitan Museum of New York, the Chicago Art Institute, the Philadelphia and Boston Museums of Art is that it fails to establish contact with the general community. The upper layer of cultured residents monopolizes to some extent the educational services of the museums in so far as they apply to mature people. Instead of refracting the light of improved artistic standards into the practical affairs of their sprawling localities, they store the culture brought to them through leisure and wealth in the sterile salons of self-sufficient cliques. These cultural Ishmaels prefer the desert of their own society to the ordered life behind the walls of social obligation. In practice, they set up barriers against the proper diffusion of improved standards of taste throughout a metropolitan area. The right to appreciate aesthetic qualities is considered a privilege of wealth and leisure.

In consequence of this widespread social treason of the cultivated minority, the achievements of the large museums in affecting popular taste have been disappointing. The Metropolitan Museum of New York has a program of intensive study in art appreciation that might well be taken as a model by other museums. If it could be transferred to a city of medium size, say Indianapolis, the effect on the community might be very striking within a brief space of time. In New York, however, the audience attracted has for the most part been composed of residents of the wealthy Central Park locality, with sufficient leisure to spend daylight hours in lectures and gallery tours.

The Metropolitan Museum has perhaps been unduly apathetic in accepting the social limitations to its educational activities for adults. The Art Institute of Chicago, on the other hand, under the auspices of the Florence Dibell Bartlett Fund,

provides evening lectures which have consistently drawn capacity audiences. These lectures are attended by more representative sections of the population than can be reached by afternoon courses. A skeptical outlook on the potential interest of the majority of citizens in artistic culture is a deadening influence in educational planning. The experience of numerous art museums in various parts of the country during the last decade is evidence of the general appeal of aesthetic matters to any segment of the society that receives practical opportunities suitable to its circumstances.

In the case of New York the principles of adult education would suggest that the energy and time of competent art instructors should be directed (where intensive education is the aim of the museum) to more carefully selected audiences. In order to reach these audiences the museum administration must take an active hand in the technical arrangements of educational programs. It might be desirable to hold a series of experimental courses during evening hours on weekdays, perhaps opening selected galleries for this purpose. It is more important, however, in view of the fact that leisured economic groups in New York lack the ability or the willingness to exercise the cultural power that might be expected from similar bodies in Columbus, Ohio, or San Francisco, California, to seek out for special training representatives of the key groups affecting the practical pattern of social living. Special types of courses might have to be devised to assist professional and other groups to relate artistic values to the activities of their daily life.

Experiments of this nature have been made by the Metropolitan Museum in the past. Achievements in training commercial designers in the use of the museum collections established a pat-

tern that was widely imitated throughout the museum world. More recently, well-thought-out courses have been given with the object of explaining essential art values in relation to objects of daily life used for home decoration or personal adornment. Instruction of this type appeals to a large body of housewives, eager to give their routine labors some of the more satisfying qualities of artistic discrimination. It is suggested that the Baltimore experiment, discussed in a previous chapter, opens up a method whereby the truly representative elements even of a metropolitan community might be drawn into active participation in adult education programs. The problem is primarily one of administrative action. Before the educational staff can plan effective programs of intensive study in art appreciation, the museum administration must recruit a student body by entering into direct relations with the representative groups that control civic behavior and in consultation with their prospective clients devise ways and means of meeting the practical exigencies of hours, place, and cost of study facilities.

The Art Institute of Chicago occupies a central location and is, accordingly, well situated to offer educational training to many sections of the population. The most notable features of its direct educational programs for adults are the Florence Dibell Bartlett free lectures; the Dudley Crafts Watson lectures for members; and the Scammon Fund lectures for members and students of the technical art school of the Institute. The endowed Bartlett lectures held in the evening attracted in 1937 an audience of approximately forty thousand people. They represent a successful venture in the training of cross sections of the population in art appreciation. Lack of funds to extend the system beyond the single series supported by the Bartlett gift appears

to be the principal obstacle to the growth of this type of activity in Chicago. As the Bartlett series of lectures were overcrowded, it is reasonable to believe that two or three other similar courses would find an eager audience if the Institute could afford the expense involved. The Dudley Crafts Watson lectures are offered as a privilege to subscribing members. Well-attended courses were given in Interior Decoration and in the Enjoyment of Art. The Scammon Fund lectures, more technical in character, are attended principally by students from the art school.

There appears to be no lack of audiences for any of the general courses provided by the Institute, but insufficient funds for the provision of free education in art appreciation keep the Institute's offerings within definite limits. It is possible that, if representative groups in the community were intelligently canvassed by the Museum administration, several series of successful courses could be offered on a fee basis. The head of the Department of Education, Helen Parker, has already built up a considerable program of lectures and gallery tours operating on such a basis. The Department, in fact, has to limit most of its expenditures to receipts received from fees and from the Bartlett gift. Greater financial support from the board and administration of the Institute would enable the Department of Education to find representative groups that might be willing to meet the moderate expenses of special courses in art appreciation.

Outside metropolitan areas intensive study of aesthetic values by almost any group in the community can be assumed to affect social standards sooner or later. The roster of medium-sized and small museums engaged in this work in varying degree would include a majority of the institutions in the field of art. A tend-

ency has existed in the past to approach the question of art appreciation through instruction in sketching, painting, and modeling classes. Though museums have had no desire to encroach on the sphere of the public or private art school, they have felt that technical skill is perhaps the easiest avenue to an understanding of good artistic standards. This concept is worth skeptical examination, as it might appear to the layman that numerous technical artists, both professional and amateur, show poor judgment in the field of intelligent criticism. Technical art skill appeals strongly as a recreational activity, and museums find ready audiences for free courses of this nature. The social or even personal advancement brought about by such activity remains a matter of conjecture. In some cases it might be said to provide therapeutic rather than educational benefits.

Several museums situated in average-sized cities are affording interesting leadership in the methods of intensive education in art values. The Cleveland Museum of Art under the educational direction of Thomas Munro has worked out a balanced curriculum of cultural courses embracing appreciation of music, as well as art in all its visual forms. Dr. Munro describes the growth of the movement toward intensive education in museums in trenchant terms:

Lacking any collective policy, museums have come to differ widely in the extent to which they have undertaken educational work. Some have developed it into large proportions; some have left it in a rudimentary stage or omitted it entirely. Wherever the development does occur, it tends to begin with certain typical services and then to ramify along divergent paths. The first step may be gallery guidance; this leads to the advance announcement of gallery talks on particular exhibits. Clubs and groups of friends request talks, then series of talks, then systematic courses, on some particular art or historical period.

New exhibitions bring throngs to the museum, and call for repeated explanatory talks. More formal lectures on art, by visiting authorities, are presented in the museum auditorium; these lead to an annual series, which someone must plan and manage. . . .

Thus, under favorable conditions, museum educational work can develop in a few years into a surprisingly elaborate mechanism. On the whole, the cultural value of these functions is so obvious that there has been little disposition to question them. Yet occasional misgivings have been expressed, especially by foreign visitors with quite different conceptions of what a museum should be.

For example, it has been said, "Why do any teaching in a museum at all? Let the works of art speak for themselves. Don't interfere with people's enjoyment of art by asking them to listen to any lectures." But no one urges the mature visitor, who would rather look and enjoy by himself, to be educated against his will. As a matter of fact, large numbers of people find that art does not always speak for itself, fully and distinctly. Especially with the recent tendency of museums to acquire examples of exotic, primitive, and modernistic art, there has developed a persistent demand for some clue to their understanding and appraisal. Advanced students, moreover, wish to penetrate as deeply as possible into the technique, the aesthetic form, the cultural background of what they see, and not merely to enjoy it in a casual and superficial way. It is in answer to such legitimate demands that museum teaching develops.⁶

The Worcester Art Museum, with the aid of the Carnegie Corporation of New York, has been engaged in an interesting experiment on the correlation of art and music. Its cultural courses also included during 1937 an outstanding series on the "Practical Application of Modern Design," in which lectures were given by many famous authorities in this field.

The City Art Museum of St. Louis, Missouri, has made a

⁶ Thomas Munro, "The Educational Functions of an Art Museum." *Bulletin of the Cleveland Museum of Art*, November, 1933.

promising addition to the usual series of public lectures and gallery talks. Well-to-do members of the community organized two groups solely for the purpose of taking definite courses of their own choice at the Museum. These groups have now been meeting for over two years and show signs of forming the nucleus of an audience for thorough training in artistic values. Though the experiment has not yet reached the scale of that in progress at Cincinnati, it is notable in that the groups provided their own organization and the costs of their continuous study did not include expensive and unusual equipment.

The task of making a comparative study of the programs of lectures and courses of the art museums of the country does not lie within the scope of this volume.⁷ From the few examples cited it may be seen that the problem can be briefly summarized by the questions: who should be taught; what should be taught; and how can the money be raised to meet the necessary costs? The philosophic problem of the relationship of modern civilization to eternal qualities in aesthetics does not require final solution by any museum before embarking on a practical program of adult education in art appreciation. The members of the community will relate present-day culture to the meaning of art in the process of receiving their training. By experimenting in courses and methods to test the reactions of his audiences, the museum curator will receive firsthand data on the power and the weakness of traditional artistic standards in everyday life. The effort to educate the untrained public may be the means by which the scholar may himself receive enlightenment.

The understanding of art under modern conditions is per-

⁷ For a well-documented study of this nature, see *Educational Work in Museums of the United States* by Grace Fisher Ramsey (H. W. Wilson, 1938).

haps more a matter of social adjustment than of individual awareness. Many features of the communal pattern of living could be improved by the introduction of aesthetic qualities. Trained leaders are required to achieve this end both through practical action and the cultivation of better judgment among the majority. The function of the art museum in this particular field is to concentrate on providing intensive training to representatives of the socially active groups in the community.

The nature of the extensive system of education in artistic values is too wide to be discussed here. It may be mentioned, however, that the leadership envisioned through intensive methods can hardly arise until some sort of demand on the part of the general public has made itself felt. This preliminary stirring of the bulk of the citizens to an awareness of dimly seen horizons is one of the principal objectives of the extensive method of using museum material. The pursuit of exact knowledge by a determined minority is usually preceded by vague curiosity and interest on the part of the majority.

Art and Society

SINCE the advent of the Protestant Reformation, the English-speaking peoples have maintained an official morality that has offered little place to the aesthetic qualities of life. Music, art, and the graces of literary expression have been classified as luxuries of living, ill related to the serious duties of social and individual existence. An organic concept of art requires that a people should use this medium as a means of worship, as a method of expressing social unity, and as a practical system of training citizens in harmonious living. Unfortunately, the visual and rhythmic arts have been driven from the central position granted them in Hellenic society into increasingly narrow corners of human interest. First, the Church censored art forms, while retaining limited varieties as instruments to rule over men's minds. Then came the culture of commerce, with its gospel of dry reason and unremitting work. During the last century the pendulum has shown signs of swinging back to a social order where artistic standards once more will be an integral part of the community pattern. In practice, however, this stage has not yet been reached, and the modern polity is still based on a drab neglect of aesthetic values.

Art museums are creations of modern society, and as such

represent the transition stage between the conception of aesthetics as extraneous to serious living and the dawning belief in the practical value of artistic understanding. In so far as they possess institutional characters of their own, apart from the social accident of their creation, they strive toward the organic interpretation of art in human life. When power and confidence come to them as self-sustaining organizations, they reach out to educational objectives. Through this means they tend to become champions of the claims of art to be treated as an effective instrument of social action. The hope of influencing the whole polity toward a civilization conforming to aesthetic qualities places museum education among the reform movements based on an idealistic concept of society.

An element, however, still exists in the world of art museums that denies the social implications of art values except along tenuous and ineffectual lines. For these social pessimists the political order is generally a grim necessity unalterably based on the predominance of force; art, on the other hand, is a transcendental value lifting a few fortunate individuals above the realities of practical life. This outlook naturally leads to skepticism in so far as widespread education in art appreciation is concerned. Museums are viewed essentially as refuges from contemporary life, available only to a detached minority of individuals. Any attempt to fuse artistic culture with the practical workings of society would be considered by this group as a betrayal of aesthetic standards in favor of an impossible romantic dream. Representatives of this point of view favor the use of an art museum as a storehouse of aesthetic objects and accept educational responsibilities grudgingly and only in limited fields.

The first step in any extensive plan of education in art appre-

ciation is the clear-cut belief on the part of museum authorities that art values have practical significance along economic and even political lines in their respective communities. Since 1876, the year of the important Philadelphia Centennial Exhibition, the concept of the social utility of art forms has grown with increasing momentum. Individual institutions at different periods have provided leadership in social interpretation, which has profoundly affected the whole body of art museums. At one time the achievements of the Fogg Art Museum at Harvard and the Museum of Fine Arts in Boston revolutionized ideas of the possibility of exhibiting collections in a manner that would be intelligible to the untrained public. More recently the growth of the industrial art movement, stemming in part from the Museum of Modern Art in New York, has attacked the hampering distinction between fine arts and practical arts. If this development becomes general throughout art museums, one of the last barriers to a practical social evaluation of artistic culture will have been broken down. The influence of museums upon each other is a subject that has not yet been properly documented in the history of the development of educational techniques. The recent practice of exchanging loan exhibitions on a wide scale has destroyed the isolation of the majority of art museums as educational entities. From now on it is possible that extensive education in art appreciation will be conducted in accordance with nation-wide standards as developed through the competitive practices of the best-equipped museums in the country.

As the extensive plan of museum education is based on the belief that art presents values that can be realized in society, the problem of the communication of these qualities is primarily

one of interpreting existing and potential social practices in aesthetic terms. Museums have to impart meaning to their collections by skilled arrangement and perhaps verbal explanations. The meanings chosen must lie within the field of customary knowledge shared by the majority of the population. Art conveys general ideas through the power of the symbol; a force that has often proved itself more effective than written or spoken words in conquering the imagination. The proper use of the symbol is to act as a catalytic agent in bringing about a meeting of minds on some matter of common interest; to convey a sense of unity of understanding and feeling to numbers of individuals facing a given situation.

A modern philosopher has pointed out that the artistic symbol serves to group human beings in natural relationships rather than to produce an indiscriminate sensation of unity in all beholders alike. "It is an instrument not essentially of social cohesion but rather of social *assortment*—of bringing together souls which are congenial and belong together and—which is just as important—of pushing apart souls which conflict and belong apart. This utility possessed by Fine Art, moreover, is not limited to the artist himself; for two persons in the presence of a work of art created by a third need only express to each other the feelings inspired by it to discover whether their two souls see eye to eye or the contrary."¹ In a minor field this bears out the testimony of many curators of art museums that their galleries seem to present unusual opportunities for the recognition of congenial souls by visitors of both sexes.

Social cohesion, whether of individuals in like groups or in

¹ C. J. Ducasse, "The Animal with Red Cheeks." *The American Scholar*, 7: 327-38, Summer, 1938.

a general community pattern, is an undeniable asset to the body politic. The symbolism of art would be used more widely to effect this end if the type of unity produced promised to be permanent and was related to practical social enterprises. Communion with fellow souls in the sharing of a common emotion is a pleasant and possibly highly therapeutic experience. Until, however, the emotion is given some intellectual content, the practical results, either in the field of education or in that of social behavior, are slight. This has long been recognized by religious bodies who always give substance to their mysteries through dogmas and ethical creeds. Art can not retain its claim to human respect if it limits itself to the sphere of enjoyment, divorced from both social responsibility and intellectual meaning. The individual artist, on the other hand, need not have the burden thrust on him of creating a universal symbol in a single masterpiece. The arrangement of selected objects from the treasury of world art so as to produce an educational effect in terms of present-day life is the task of the philosopher-connoisseur—the ideal director of an art museum. In general, individual works of art have to be linked into a symbolic order before they have power to convey to the untrained eye the impression of some intellectual idea of social moment.

In a previous book in this series,² covering the educational work of museums in the New York metropolitan area, an attempt was made to classify the principles governing the arrangement of objects in art museums. The three leading methods discovered in the limits of New York were the chronological method, revealing the growth and meaning of historical culture on a wide scale; the technological method relating industrial civiliza-

² T. R. Adam, *The Civic Value of Museums*. A. A. A. E., 1937.

tion to aesthetic qualities; and the native or patriotic method which employed the symbols of art to deepen the citizen's understanding of his native land. These crude classifications may be applied to almost all the art museums in the country. To the inexpert visitor, at least, the arrangement of the permanent collections of the majority of art museums seems to convey one or another of these meanings or perhaps a mixture of them all. A trained eye would, of course, recognize considerably more meanings in the many subtle arrangements that pass over the heads of the culturally ignorant. From the point of view of extensive education, however, the ability of the unawakened citizen to read meanings must be taken as the criterion of the museum's intelligibility.

The chronological method, symbolizing historic ideals of beauty and life, is the favorite method of arrangement in wealthy museums possessing representative collections. The Museum of Fine Arts in Boston should perhaps be given credit for initiating one of the most important steps toward making this arrangement clear to the general public. Breaking traditional museum practices of their day, the Boston Museum authorities separated their abundant materials into study collections and display groupings. The latter were exhibited so as to permit the assiduous visitor a bird's-eye view of outstanding examples of aesthetic objects in their proper chronological order. When first initiated, this development was a great step forward in making a museum intelligible to its customers and thus enhancing its educational value.

The practice has been widely copied and further refined by other great art museums. The Pennsylvania Museum of Art at Philadelphia has perhaps reduced the principle of a panorama

of world art to its most attractive form in this country. The question of the relative merits of the collections of the Metropolitan Museum of Art of New York, the Art Institute of Chicago, the Museum of Fine Arts in Boston, and the Pennsylvania Museum of Art is one for competent art critics to decide. As far as this volume is concerned, the fact is merely noted that all these institutions have adopted a chronological method of displaying their treasures.

The world view granted by these powerful institutions to many of us is rather overwhelming; the mighty sweep of the ages symbolized in great art affrights our imagination. The educational opportunity lies before us, often skillfully and compellingly arranged, but the content is too disturbing and remote. Veiling our eyes from unfamiliar glories and terrors, we hurry on through endless galleries till museum fatigue offers our timid minds the salve of physical escape. In metropolitan areas this high challenge to human capacity is probably desirable. Great representative collections of world art are needed to preserve a proper perspective in human affairs. Though only a small minority of the clustered millions have either the courage or the pertinacity to study these offerings to the point of comprehension, the rights of the few in this case outweigh the indifference of the many. Even from the narrow point of view of the diffusion of knowledge, the existence of institutions representing world culture in a single field is a matter of congratulation. To destroy the magnificent impression of the unity of artistic standards conveyed by the chronological galleries of a great museum would be to threaten the sources from which knowledge may be diffused to the masses.

When a community museum with a limited collection at-

tempts to present a world view of art, however, the grandeur begins to fade and the disadvantages become more apparent. In the first place, a question arises as to the field that must be covered by the objects displayed before a fair conception of the growth of culture can be conveyed to untrained minds through the symbolism of art. The galleries of the Metropolitan Museum of Art, for example, are sufficiently inclusive to present almost all the angles of visual, aesthetic approach to life attempted by mankind at different times and in diverse regions. If, however, the Minoan collection, the greater part of the Hellenic and Roman collections and the Chinese galleries were arbitrarily removed from the Museum, it is doubtful if the impression given to the careful visitor through a then incomplete chronological arrangement could be accounted an accurate educational message. This danger faces the majority of smaller art museums that seek to maintain a strict chronological method of display based on material that fails to represent all the fields of artistic achievement. Visitors are confused by a comparative study of art forms that overemphasizes some period in which the museum chances to be well represented and fails to present beginning, end, or true proportion to the idea of art as cultural history.

Among museums outside metropolitan areas the chronological method has been used with telling effect in the City Art Museum of St. Louis, the Nelson Rockhill Galleries in Kansas City, the Cleveland Museum of Art, the Detroit Museum of Art, and the Worcester Art Museum. These institutions possess exceptional collections of art objects arranged in general with consummate skill. The fact remains, however, that the attempt to build up collections that will cover every field of artistic achievement is beyond the power of the majority of American commu-

nities. Small museums essaying this task generally exhaust their funds in the acquisition of a few valuable objects within a limited field. The educational message to be conveyed by their collection as a whole has to be postponed to an indefinite future when great gaps in the material will have been satisfactorily filled. Public confusion on the intellectual meaning of art is justifiable when even experts admit that the story to be told by the average museum has many missing chapters.

If the chronological arrangement of art symbols is necessary for popular education, the museum of moderate size will have to experiment boldly with good reproductions for public display. Reproductions can and often do tell artistic lies. They are at times as capable as false religious prophets of betraying great truths by misleading representations. Museum curators are naturally reluctant to introduce this dangerous element into their galleries. They have cause to fear the working of a Gresham's Law in aesthetics; that bad imitations may drive good originals out of public taste. Nevertheless, the primary educational objective of museums requires that collections be arranged in logical, balanced patterns, comprehensible to the untrained public. The careful use of reproductions, labeled as such, is one of the means by which this end may be achieved in art museums of moderate size.

It is perhaps true that a permanent collection of art objects is a difficult instrument of extensive education, even in the hands of a highly skilled director. Other purposes besides making art forms immediately intelligible to the widest number of people have to be served by the museum collections. The idea of a storehouse of cultural values, planned for the benefit of future gen-

erations as well as for present-day patrons, can not be wholly neglected. Again, the permanent collection is the proper source of information for the minority prepared to make an intensive study of artistic standards. These interests may not be sacrificed to an indiscriminate popularization of museum material. For these reasons, among others, an alternative instrument of direct educational value has been developed in the temporary exhibition, either obtained from outside sources as a loan or created by curatorial skill from elements in the museum's own permanent collection.

Flexibility and directness of popular appeal are the hall marks of the temporary exhibit. A clear theme is generally illustrated in aesthetic terms by the arrangement of objects, whether it is the romantic career of Gauguin as told by the artist's own works, or a history of sport viewed through the instrumentality of early prints.

Temporary exhibits are intended to tell a story that will be plain to eyes of casual beholders. Exhibitions of this nature tend to build up a group of visitors who form the habit of visiting their art museum once a month, or as often as new exhibits are presented. Permanent collections seldom possess the power of constantly attracting the same group of people. A single visit a year to the local art museum is generally above the average performance of the normal citizen when the collection is static. The ideal at which many directors now aim is to persuade a large section of the public to regard their art museum somewhat as they would a motion picture theatre. If the habit of regular attendance is once acquired, visitors look forward eagerly to a change of exhibition and keep themselves informed of the museum's programs. Every community has, of course, different

potentialities concerning the number of exhibitions it can digest in a single year and the length of time that these temporary showings can continue to attract satisfactory attendance.

Museum authorities have in the temporary exhibition an instrument which can be adapted to the needs of a locality of almost any type. Through careful study of the social characteristics of their neighborhood, they can plan showings which illustrate themes of particular interest to social and economic groups powerful in their community. John Cotton Dana of the Newark Museum, for example, pioneered in the task of interpreting art values to a population predominantly industrial. This work has been carried on by his successor, Beatrice Winser, through a policy of temporary exhibits designed to link art with the specialized employments of the region.

Official trade unionism is now commencing to see the value of obtaining the services of art museums in interpreting artistic standards in relation to definite skills of organized groups. Commenting on the experiment of the Baltimore Museum of Art in appointing cooperating committees, the *American Federationist* editorializes:

Labor's skill in making the tools for work and the skill and intelligence with which it uses these tools determine the quality and the beauty of the surroundings and equipment which we all use in living and control our standards of what is suitable for the use of men. The work of our hands discloses the quality of the mind and personality that control them. Labor is something infinitely more than a burden bearer or the drudge performing the duties that others would escape. It performs services necessary to maintenance of our common life and performs them with dependability, patience, and ability, but unless labor organizes to advance its own welfare and to make clear the qualities that give its services value, what we create may be valued

entirely separately from its creators. Yet it is human personality expressed in work that gives a thing distinction. A beautiful piece of silver reflects the beauty in the mind of the one who designed and fashioned it. A beautiful fabric comes only from skillful and understanding fingers. Beautiful glassware comes from understanding of texture and ability to transform it into beauty of form. And so on through all forms of work. There is no such thing as unskilled labor, for every occupation requires coordination of mind and muscles.³

Apart from the interests of organized groups, who find in temporary exhibits a method of linking art to their specialized concerns, the elements of novelty and immediacy in these showings attract sections of the public sensitive to the appeal of happenings of the moment. As an illustration of the drawing power of art when it appears in the role of current news, the experience of the Department of Fine Arts of the Carnegie Institute in Pittsburgh is noteworthy. The principal function of the Department is centered in its famous International Exhibition, held annually between October and December. Paintings hung in the Exhibition form a topic of news; the judgment of the Museum authorities in their selection and the comment of the art critics enlighten the public on international standards of aesthetic taste. Visits to the Museum during the International Exhibition create the feeling of keeping abreast of the times in the realm of art. Whether the untrained visitor is pleased or displeased by the paintings selected, a distinct impression is created through the challenge to personal discrimination. Visiting the art museum becomes less of a solemn, Sunday ritual and more of an intellectual sport—a means of testing the acuteness of one's taste against the verdict of the experts.

³ *American Federationist*, 45: 468, May, 1938.

In proof of the awakened interest in art appreciation brought about by the annual International Exhibition, records of the Educational Department of the Museum for 1937 are relevant. During the nine months of the year prior to the Exhibition, gallery tours and lectures were requested by less than thirty groups covering little over a thousand individuals. In the three months of the Exhibition, the Museum's instructors were called upon to give educational service to approximately three hundred and fifty organized groups comprising nearly thirteen thousand people.

The use of the temporary exhibition as a stimulus to an appetite for learning on the part of the general public is, of course, merely one of its possible avenues of usefulness. Whenever practical, museum directors aim at presenting a show that combines qualities recognizable only to trained minds with the more superficial elements likely to appeal to the curious majority. This multiplicity of aims creates striking differences in the practice of holding temporary exhibitions throughout the art museums of the country. In general, it may be said that where exhibitions are changed once a month or more frequently, their primary purpose is to inform and stimulate a mass audience. Thus, during 1937 the Minneapolis Institute of Arts held thirty-six temporary exhibitions, nine of which were devoted to sketches and paintings, thirteen to prints, and fourteen to the decorative arts. In the same year, the Detroit Institute of Arts held twenty-seven exhibitions, ranging from paintings by Cezanne and Utrillo to the showing of the Detroit Photographic Salon. In both cases it is obvious that the frequency of the exhibitions was directed toward stimulation of public taste. More ambitious and painstaking collections, even though considerably fewer in number,

might have possessed greater attraction to the trained aesthete. Few museums, however, have a large budget for the purposes of temporary exhibitions, and real sacrifices of aesthetic preference often have to be made in order to keep public attention constantly aroused.

Sometimes a museum is fortunate enough to combine public interest with the most scholarly standards of art appreciation. The John Herron Art Museum of Indianapolis brought together in 1937 a thoroughly representative collection of Dutch paintings of the seventeenth century. This temporary exhibition proved unusually satisfying to popular taste and was a landmark in the aesthetic experience of the trained minority. An enduring publication resulted from this exhibition, with a preface by Booth Tarkington. Little doubt can be cast on the educational value of such a venture, though the effort must have proved exhausting to the Museum's exhibition funds. From the educational point of view occasional exhibitions of a very ambitious nature are touched by a distinct element of gambling. If they should fail to catch the public eye, the Museum's resources are wasted for a considerable period, and even when they are successful, the lengthy intervals that must necessarily elapse between such ventures present obstacles to a healthy continuity of interest in artistic happenings on the part of the public.

Within the last decade art museums have adopted the policy of temporary exhibitions in so wholehearted a manner that the frequency and quality of their displays have tended to become measures of the dynamic power of particular institutions. The ingenuity of directors in using these means to elucidate questions of the moment in terms of traditional aesthetic values is insufficiently appreciated in formal educational circles.

As a matter of personal opinion, the author believes that a current topic, say that of extreme nationalism, could be explained to the citizenry of a moderate-sized community more clearly and intelligibly by the director of the local art museum (provided he was able to lay hands on the necessary materials) than by the combined efforts of the faculties of the neighboring universities. The art museum, skilled in the measurement of the public's capacity to digest ideas, would construct an exhibition around selected cartoons and drawings, presenting simple ideas with lucidity and force, whereas the literary scholar would explain by the spoken and written word, with perhaps both eloquence and grace, yet with little practical experience of the limits of a wide audience in the assimilation of ideas and facts. In general, the daily routine of maintaining public interest in their institutions brings museum directors in contact with realities of audience reaction that seldom trouble the complacency of more sheltered educators.

If the recent movement to educate the nation in favor of international peace be taken for sake of example, the comparative neglect of the art museum as an educational instrument is revealed. Organizations committed to this end have made through their literature a considerable contribution to popular understanding of the causes and perils of warfare. Radio broadcasts have been used extensively to influence and inform the public. Even the colored advertisement, an obviously dangerous medium, has been enlisted by some reputable groups to stimulate general interest in their message. The educational power of over two hundred art museums located in the population centers of the country apparently has escaped the attention of these responsible bodies. Temporary exhibits composed of various types of

art forms could convey innumerable facts concerning the cause of peace in a manner calculated to excite and inform important sections of the public. The high standards of museums would protect audiences against careless propaganda and permit the visual message to be conveyed with honesty and sincerity. Art museums have neither the funds nor the specialized knowledge to create exhibitions of this character on their own initiative. They would, however, prove invaluable allies to reputable organizations eager to communicate with the general body of citizenry through visual means.

It might be possible to comb the whole range of popular education, from health matters to problems of economics, and discover a practical use for the art exhibition in almost every case. In hard fact, museums are never likely to possess the resources that would enable them to carry out even a fraction of the experiments possible in this field. They must await the tardy awakening of more powerful social bodies to the practical uses of sound visual education.

The question of cost is the most serious practical obstacle to the extension of temporary exhibitions on the part of the average museum. Methods of borrowing objects for display, problems of shipping, insurance, and arrangement belong to a technical discussion of museum management. It is sufficient to note that a temporary exhibition is always an expensive production whether borrowed in whole or in part from outside institutions or made up from the museum's own collection. Various plans have been tried out to overcome this difficulty through some method of centralizing the arrangement of temporary exhibitions and circulating them among the smaller museums at low unit cost. The National Exhibition Service of the American

Federation of Arts is particularly noteworthy in this field. One hundred and eighty-two traveling exhibitions under fourteen general headings have been arranged for the 1938-39 season. Many of these exhibitions go to schools and colleges as well as to art museums.

Of all museums the Museum of Modern Art in New York is perhaps the most active in the circulation of materials through traveling exhibitions. This Museum's interest in the aesthetic qualities to be found in industry, commerce, and in objects of everyday use gives it something of a missionary spirit in the world of museums. It appears to bear a generous and somewhat unfair burden of the costs of educating the nation in artistic standards in relation to practical life. The scope of its services might be greatly increased were there responsible bodies among manufacturers, retail merchants, and professional experts capable of providing some measure of practical support.

Potential mediums of education flourish slowly in a society where educational objectives are dimly seen by those who actually hold power. The day of the medieval guilds when producers were held liable before the bar of law and public opinion for the quality, artistic as well utilitarian, of their products unfortunately has passed. Popular education in artistic standards, in so far as they affect industrial society, must await the growth of a feeling of responsibility for their own products on the part of economic leaders. It might prove a favorable sign if chambers of commerce and associations of manufacturers would devote their energy to educating the community in the practical and aesthetic values of industrial production.⁴ The present organiza-

⁴ For a clear analysis of the actual educational programs of trade associations, see *Enlightened Self-Interest* by Dorothy Rowden (A. A. A. E., 1937).

tions seem to rely too confidently on their powers as political strategists for the maintenance of their privileges. In a democracy, a certain measure of popular education in the processes of industry provides a useful insurance to economic leaders against public intolerance. Intelligently used, modern industrial art could inform the bulk of the American people of the comparative progress of their economic system as lucidly and convincingly as statistics, speeches, or even bill-board posters advertising "the American way." In this case again, the museum can act only as a medium of expression, and the development of its full potentialities must await the cooperation of responsible bodies in the community who have honest information to communicate to the citizens. Propagandists shun the use of true art, for what is dishonest in content is false in form. The professional body of art scholars in the museum world stand guard against the degraded aesthetic values embodied in lying symbols. When industry and commerce are able to explain their products through the medium of a good art museum, the public need have little fear of being misled.

Where specialized material is concerned, traveling exhibitions arranged and circulated from a single headquarters reduce costs for individual museums to a considerable extent. This is probably true of the temporary exhibitions in American art lent by the Whitney Museum as well as of the loan material of the Museum of Modern Art. In general, however, directors of art museums appear to prefer exhibitions arranged in their own workshops to the unified selections forwarded from some central headquarters. This preference is based on the principle that each community has tastes and whims of its own which must be taken into account in the creation of local interest. When the

temporary exhibition is considered for use as an educational instrument on a national scale, the pitfalls of overcentralization become apparent. Efficiency and economy may be superficial gains if they strike at the main foundations of popular support for educational programs. The local pattern of culture always seeks its own image even in the universal values of art, and the selection of material for exhibitions must bear the stamp of civic pride and knowledge.

A social basis for extensive education in art appreciation is to be found in demands from organized interests in the community for interpretation of their functions in terms of art. These demands may be satisfied through a policy of temporary exhibitions created by the museum authorities with the practical support of the interested parties. The traditional role of civic art associations, though helpful in the past, lacks the factor of true community representation. Citizens should seek out art as an element in everyday life, as a subject firmly linked to their economic or social well-being.

The Revival of Nature Lore

THE relation of man to nature is a broad concept, vague and diffuse enough to be relegated to the leisurely meditations of philosophers. Under cover of this unsatisfactory phrase, however, lurk many sharp problems of everyday moment. Mankind, both in its social and individual aspect, depends for the fulfillment of the good life on a clear understanding of its environment. It is the fashion nowadays to speak of human "control" of natural forces; yet this is merely a manner of speaking, a verbal sop to our pride of species. Major conditions of human environment, such as climatic changes, the nature of the soil, the processes of growth and decay, are subject to understanding rather than control. The use of intelligence has enabled mankind to adapt itself more rapidly and satisfactorily than other animals to the unalterable bases of existence.

For many millenniums the human race depended for its whole livelihood on agriculture and animal economy. Recent experiments in industrial civilization have endured so brief a period that their lasting success remains in doubt. In the past, trading empires, such as Carthage, knew their few centuries of proud luxury, then vanished into the fertile fields. Even in modern times, sober scholars can point out that over sixty per cent of

mankind lives by direct cultivation of the soil, and, if those intimately dependent on agricultural prosperity were included, the figure would probably rise to eighty per cent.¹ Climate and soil productivity still condition the incidence of poverty and the growth of culture over the greater part of the world. Mechanical ingenuity remains a doubtful substitute for painful study of the processes of nature in ordering human advancement.

Mastery over natural forces in place of understanding and adaptation is an ideal that has spread beyond the economic field. Education, since the days of Plato, has tended toward a verbalization of ideas, the creation of a supernatural or an extranatural world where the human mind could be free of the restrictions of its environment. Even the admirers of Hellenic culture have slurred over the long apprenticeship of Socrates to the study of natural history as a prelude to his development of the dialectic method. Both church and society during medieval times combined to create a practice of learning that might fairly be described as unworldly, in the strict meaning of the term. This separation of intelligence from the bonds of natural events proved harmless enough in societies where learning was the prerogative of an inconsiderable minority. For the bulk of the people the daily routine of agricultural life sharpened powers of observation and forced compliance with natural laws. The fashionable dichotomy between body and spirit, nature and God, was the intellectual flower of a polity firmly rooted in the sustaining earth.

Educational traditions suitable to monkish scholars have been

¹ Ellsworth Huntington, "Agricultural Productivity and Pressure of Population." *The Annals of the American Academy of Political and Social Science*, 198: 73-93, July, 1938.

magnified out of all proportion through the appearance of universal schooling. Less than a century ago, however, formal techniques of learning still struggled for supremacy with older modes of understanding gained through firsthand observations of the processes of nature. Farm boys and girls trooped to school through a countryside alive with happenings that claimed their attention. A classical discipline dispensed in the schoolroom was leavened by the naturalistic attitude of mind resulting from close contact with a nonhuman environment. For the common man, at least, education and knowledge were not always the same thing, and, where opportunities for the former were lacking, compensation could be found in an older tradition of patient observation of facts.

Present-day society has brought together large populations to live and work in surroundings where they are cut off from normal opportunities to observe the workings of nature for themselves. Formal education, the transmission of systematized secondhand information, is the sole means of bringing to these millions the power to use their intelligence for the balanced ordering of life. In a city, knowledge is almost invariably derived from the minds of fellow beings, from their conduct, their words, or a study of the work of their hands. Even the weather, in time, seems to the confirmed city dweller to become a question of the fiat of the official meteorologist. In any case, the observation of signs and recurrences through which he might attain the weather-wise mood of the countryman seems to be no longer his concern.

In place of the ancient dependence of men on their personal ability to observe nature and plan their lives according to its rules, our modern citizen pays lip service to a faith in science. The term "science" to the ordinary man covers the field of me-

chanical ingenuity in conjunction with a great background of abstract knowledge which he seldom pretends to understand. Science, in practice, is the authority of a small caste of able scholars exercised over the outlook of the rest of the population. Individual research or individual judgment remains the privilege of a microscopic social minority.

The processes of education, both for social and individual purposes, have to take into account this severance of modern man from immediate contact with the nonhuman environment. In previous times, safeguards existed against weaknesses in educational systems; when schools and learned men failed to guide mankind in balanced living, individuals were forced to make their own observations of nature and to draw their own practical conclusions. This freedom has now seriously diminished, and any failure of the educational process reacts throughout society with dangerous force. The relation of man to his environment is no longer a matter of independent adjustment by informed individuals, but a question of social control decided by political authorities on the basis of the abstract reasoning of unworldly scholars.

It does not lie within the scope of this volume to analyze the effects of industrial civilization on the human spirit. Nevertheless, some attitude must be adopted if only to provide a criterion for the functions of museums of natural history. A body of opinion exists which regards these institutions as interesting and valuable relics of a former age when every man was his own naturalist and a judge of the business of collecting and arrangement. According to this point of view, the popular function of the natural history museum has now vanished, except in the field of superficial curiosity. The remaining educational task of

these institutions is held to be the promotion of scholarly research—a type of learning which can be communicated to the untrained masses only through the authoritative dicta of the new priesthood of science. This is perhaps an unfair summation of the megalopolitan outlook which sees in the massing of men in cities under the authority of political, economic, and intellectual hierarchies an inevitable development of scientific civilization. In practice, varying shades of this belief have had a noticeable effect on the relations of natural history museums to the community, and often they have been responsible for casting doubt on the effectiveness of museums as popular educators.

The author chooses to adopt a conservative attitude, claiming that the substitution of theoretical, dogmatic science for the opportunities individuals formerly possessed to make personal observations of the workings of nature is too recent a development to be fully endorsed in either the social or the educational field. To parody a famous phrase from the story of English freedom, it might be said that the power of secondhand learning over the minds of men has increased, is increasing, and ought to be diminished. If this viewpoint is valid, the place of the natural history museum in civic culture is one of grave importance. Assuming that city dwelling introduces an element of unbalance in the field of practical learning, overemphasizing the human and authoritative foreground of life, one of the methods of compensation lies in confronting the citizen with the unalterable background of nature described in lucid and dramatic terms. The museum can not, of course, substitute for the unspoiled countryside as a means of bringing man into harmony with his environment. It can, however, use the intellectual and emotional symbols customary to the city dweller to impress great numbers

of people with their basic place in nature. In the struggle to restore independence of judgment to herded men and women, the museum represents the ancient rights of observation and deduction as against the pressure of rote and rule.

One of the first steps that museums of natural history must take in planning educational objectives is a strict definition of their proper field. The old term, nature study, has lost much of its connotation in our urban communities, and the general concept of science is too all-embracing for practical purposes. Man's environment is the subject material of institutions such as the American Museum of Natural History, the Field Museum of Natural History in Chicago, the Museum of the University of Pennsylvania and the Academy of Sciences in Philadelphia, the Carnegie Museum in Pittsburgh, the Cleveland Museum of Natural History, and the Buffalo Museum of Science. Departments of anthropology, botany, geology, and zoology, with their numerous subdivisions, cover the basic factors of the environmental background of the human race. This body of systematized knowledge represents the understanding mankind has achieved of its relation to the rest of nature. It may be contrasted with the type of science that seeks to change or control existing laws in favor of man's intellectual will—the sciences of gadgetry. Thus, ornithologists have long studied and classified the flight of birds, describing it as one of the environmental factors that have influenced human development. Through practical application of this hard-won understanding of nature, the aeronautic engineers have built their devices to give man a superbiological power of flight. Each of these types of scientific approach to the world would be incomplete without the other.

From the educational point of view, however, a measure of

artificial separation is permissible. Neither the individual nor the community may safely be left in ignorance of a simple outline of the environmental factors that affect human existence. Natural science provides the materials essential to the cultivation of practical knowledge and the formation of independent judgment. Inventive or applied science, on the other hand, is the proper field of the specialist. Under the sane principle of the division of labor, only a specially predisposed minority in a modern community need submit itself to the rigorous discipline of applied science or abstract scientific research. Benjamin C. Gruenberg, in his book *Science and the Public Mind*, quotes a pointed conversation between Dr. Slosson and a laboratory scholar on this subject: "I was once, in talking to a distinguished scientist, deploring the popular ignorance of modern research. 'The public does not know what is being accomplished in the laboratories,' I said. 'Why should they?' he retorted; 'It is none of their business.'"² There is a certain hard practical sense in the scientist's point of view. As it is impossible for the general public to receive the long training required to permit intelligent research, the objective of spreading detailed news from specialized laboratories is more likely to lead to harmful misinformation than true enlightenment. Even under favorable circumstances it could achieve little more than the circulation of scientific gossip.

Dr. Gruenberg himself suggests the proper approach to popular scientific education:

On the other hand, science for many has to be deliberately humanized, that is, restated in terms that are significant for humanity at large, not merely for the scholar or the specialist or the technician. It is not to be expected that science will be restated so that all of "humanity"

² Benjamin C. Gruenberg, "Science and the Public Mind," p. 29. McGraw-Hill, 1935.

can grasp it; it is necessary only that the scientist or the teacher ask himself what this science means as a human pursuit or activity, what its findings mean as affecting mankind's outlook, what its results mean as affecting the quality of our living.

Translated into terms of museum education this passage implies that the observed facts of nature should be arranged so that they apply in dramatic terms to human activities. The task of the natural history museum in the field of public enlightenment is to present a coherent synopsis of the environmental background nature has provided for the individual human being. If an accomplished dramatic producer was given this staggering assignment, he might point out that the wealth of materials available could not compensate for the practical limitations to be expected in the power of the audience to assimilate ideas. The first business of competent presentation, he might say, is to reduce the intellectual message to a few clear-cut, interest-laden concepts and then to concentrate the material so that these pre-established ideas will stand out in terms of dramatic meanings. A wealth of secondary ideas and enriching qualifications may be woven into the methods of presentation only under condition that they do not obscure the dramatic values of the basic plan.

Museums, of course, are not theaters and their educational exhibits can not be arranged with all the striking illusions of stagecraft. Yet a true analogy does exist, and the habitat group to be found in all natural history museums is a recognition of the need of dramatic display. From the point of view of visual education, the modern museum has created many fascinating and telling scenes. The major criticism that might be leveled at its efforts is that no one has yet written the whole play into which these separate scenes might be cunningly fitted.

The story of man's environment is still shrouded by natural

history museums in an enveloping cloak of scholarly reticence. A practice is still favored of placing a generous collection of materials on a single subject in a suitable hall, arranging it with scientific skill and aesthetic taste, and leaving the visitor to form his own impressions of the relation of the subject to the rest of nature and the practical affairs of men. In fact, the artistic and scholarly skill with which material is arranged in individual halls of some great museums has reached so high a level that the ordinary visitor is overwhelmed by the presentation of one or two divisions of a general subject. To cite an example, the Akeley Hall of the American Museum of Natural History gives a presentation of African zoology that is entirely satisfying as such. It does not, however, incite the visitor to a well-rounded study of animal life or prepare him materially for a sober study of forestry or other subjects in adjoining halls. The competition between the curators of various departments to win public favor by presenting their exhibits in attractive and striking forms is highly laudable. However, it is the duty of museum authorities to coordinate the different subjects in a single educational plan that will be clear to the public. Until this coordination and balance have been accomplished by vigorous direction on the part of the museum itself, the community will have little opportunity to clarify its picture of the place of nature in the human environment.

In the Field Museum of Natural History at Chicago, the visitor enters the Museum through the Stanley Field Hall which contains representative exhibits intended to give an introductory view of the four sciences which come within the institution's scope. In this case, an opportunity exists to sketch the full natural environment of mankind in a few bold strokes, relating each subject to the others in terms of human affairs. The task is

probably too difficult to be honestly accomplished in a single hall. Rather than risk its scholarly standards the Field Museum has contented itself with displaying interesting types of exhibits from each department, with no necessary relation to each other. The visitor is permitted to sample the various activities of the Museum and, when his curiosity has been aroused by some particular display, he naturally wanders into the systematic collection in that department.

The Buffalo Museum of Science probably has experimented more boldly than any other museum in the country with a coordinated educational plan of display. Each of its small halls is linked with the others in describing the natural background of life. The comparatively small size of the Museum, however, is one of the factors that makes this possible. The quantity of material to be shown is not overwhelming, and the ingenuity of arrangement provides an exciting sequence which carries the visitor round the Museum without undue fatigue or intellectual confusion.

The success of this type of smaller natural history museums is further confirmed by the experience of the Cleveland Museum of Natural History. In this institution comparatively limited fields of natural science are described with a strict eye to popular attention. Rooms devoted to the fauna of Ohio have perhaps the strongest relevance to the educational needs of the community. The dramatic skill of the director, however, has transformed exhibits such as a collection of gems and one of Florida fishes into displays of striking beauty and meaning. Harold L. Madison describes some of his experiments in educational impressionism in the following terms:

In all our adventures with light and color during the depression years, we have not tried to construct habitat groups nor in any way

endeavored to reproduce in model form the habitat of an animal. Rather we have tried to suggest through the use of color and lighting the sort of atmosphere in which the animal would naturally be found or, as in the case of the hyena, suggest his character with the background. We think there are some advantages in our method, among them economy of installation and flexibility, which permit frequent change of exhibits. And, by the way, what is to become of museums if they do not go modern?³

In the light of results achieved in Buffalo and Cleveland, the number of dynamic natural history museums located in average-sized cities throughout the country is disappointingly small. The collections of the early natural history societies appear, in general, to have fallen on evil times, and untrained audiences have been driven out of decaying buildings by the boredom of unimaginative accumulations of scholastic bric-a-brac.

The Colorado Museum of Natural History, at Denver, has not been touched by the general decay that has attacked most of the small natural history museums. This institution has received solid support from the community (its annual attendance is three hundred thousand in a city of equal population) by presenting a coherent and thorough display of the regional environment in terms of natural science. The limitations of the subject bring out the practical applications of this type of knowledge to the everyday affairs of the community. When the interests of people are affected in their capacities as sportsmen, soil cultivators, or nature lovers, they show considerable capacity for careful learning. When scientific collections are arranged to illustrate the background nature has provided for a definite region, the educational plan involved is clear to the bulk of residents.

In Chicago, the long-established Academy of Sciences has main-

³ Harold L. Madison, "Color and Light." *The Museum News*, 14: 11-12, September 1, 1937.

tained a small natural history museum founded on the plan of regional exposition. The continuing growth of this minor institution, despite the presence in the same city of the world-famous Field Museum, illustrates the specific need for this regional type of nature study.

The general neglect of small natural history museums is attributable to a multitude of causes, few of which can be competently analyzed in this volume. It might be ventured that the growth of the conservation movement, both as a political force and a social development, has been disappointing in its relations to popular education. A desire for immediate results has led in the political field to a rash of prohibitive laws and the appearance of an extensive bureaucracy for their enforcement. Though this development was probably necessary, it has without doubt robbed the body of citizens of some part of their feeling of individual responsibility for the preservation of animal and vegetal resources. The laws of nature have been transmuted for the individual into the police regulations of half-a-dozen government departments. Private societies, devoted to the preservation of natural treasures, have followed the current fashion. A great part of their energy is devoted to assiduous lobbying in legislative halls and a correspondingly lesser share to the task of enlightening the public on the meaning of natural resources.

Perhaps the fact that colleges and universities have taken over many promising collections for the use of their students is one of the reasons why the smaller natural history museums have declined as instruments of popular education. Academic institutions have notoriously shown little conscience in converting resources intended for popular education to their narrower purposes.

Nature study is primarily a social matter. In its extreme individualistic form, of course, it may lead to the mysticism of St. Francis, the brother of all animate and inanimate things. This manifestation, however, is comparatively rare and, if the practice of expressing an overwhelming sympathy for all natural objects ever became universal, the processes of normal life would be upset. Mankind, in general, seeks to understand nature in order to regulate its own manner of living in conformity with basic laws. Study of the nonhuman environment provides definite results in the arts of sport and the crafts of economics. These are social values, and the type of education that will further them is one aimed clearly at social purposes. In modern times the achievement of improved communal standards of living through slow educational processes has fallen into disrepute. Every avenue of social activity is now regulated by a voluminous code of laws administered by a ruling caste of officials. As a consequence, the place of the regional natural history museum as a center of educational control has diminished in favor of game wardens, agricultural experts, state meteorologists, and a host of other supervisory agents.

It is suggested that the political authority, while weakening the freedom of individuals and groups to exercise independent judgment in relation to the environment, owes the compensating duty of education so that the dictates of expert officialdom may at least bear meaning to obedient citizens. Many of the state museums would make excellent centers for the dissemination of sound nature education. A distinguished institution, the Ohio State Museum at Columbus, for example, has already performed valuable services as a center of archaeological and historical information for the people of its state. A department of natural

history, dealing with the resources of the state, is being slowly built up despite inadequate support. The major obstacle that has to be faced by museums of this character is the indifference and irresponsibility of legislatures from which they receive their financial grants. The stock in trade of politicians is laws; their feelings toward popular education for adult citizens as a means of social betterment is generally one of puzzled jealousy.

If neither the political powers, the vanishing academies of sciences, nor introverted colleges can be relied upon to further popular nature study through educational museums, a new approach to the subject must be attempted. Many associations exist throughout the country for the furtherance of general or special interests with relation to natural history. These may be either on a national or local scale. In Philadelphia alone, W. Stephen Thomas, the Educational Director of the Academy of Natural Sciences, listed over fifty organizations of this character in the city and its vicinity.

It is apparent that in each region these multitudinous organizations should be brought into contact with each other and should seek to pool their common needs in the formation and support of an educational museum. The coordination of such bodies, ranging from butterfly clubs to mineralogical societies, is a task analagous to the rationalization of a widespread industry where innumerable individual producers function in ignorance of their common problems.

It is suggested that popular nature study suffers from an over-complexity of organization, with a corresponding lack of basic principles that might be applied to the diverse conditions of the various regions in the country. Simplified direction, in so far as it exists at the present moment, is limited to the field of law and

administration. It can not be emphasized too strongly that a fundamental antagonism exists between the method of social control through law and the principle of control through general education. The latter function is out of balance in nature conservation because its organization is greatly inferior to the ordering of political power. Small museums, operating independently of each other, provide slight hope of restoring natural history to its place as an instrument of popular judgment over the control of the nonhuman environment.

The question remains whether the great natural history museums have the power to assume educational leadership for the nation as a whole. These institutions are the repositories of learning in natural science covering the whole world; the application of their material to the strictly American scene is only a limited part of their function. It remains true, however, that from the educational point of view the bulk of their audience possesses interests centered around the national environment. This factor might be taken into account in the educational planning of the great museums in order that some experiments might be attempted on an adequate scale in the proper integration of natural science material with the American environment. The resources of institutions, such as the American Museum of Natural History and the Field Museum of Natural History, are probably sufficient for the presentation of synoptic systems of display in this special field.

When major museums of natural history accept the responsibility of weighing the environmental factors affecting the practical activities of men, they will come perilously close to passing judgment on controversial topics. This danger is constantly in

the mind of curators who recognize that scholarship has neither place nor rights in the political arena. A certain measure of risk has to be taken, however, if learning is ever to influence social life. The fully equipped museum may dramatize the background nature has provided on the American continent in terms that are clear to any alert visitor. These displays may give form to questions and problems that could not otherwise have found expression in the mind of the average man. The museum, however, need not take upon itself to answer the questions raised by the advocacy of specific courses involving political or economic policies. Its educational task would be fulfilled when it had enabled the majority of citizens to visualize the major factors involved.

Presentation of synoptic studies of our natural environment, backed by the authority of one or more great museums, would constitute news that would circulate through many channels to the widest possible public. Newspapers and periodicals would debate questions raised but not answered by the museum exhibits. The numerous unconnected organizations concerned in nature study might find a true focus through which they could coordinate and make effective their activities in both the social and educational fields. It would be for these bodies, and not for the museum itself, to translate scholarly judgments into the fields of political and economic action.

In practice, it would appear that four or five commanding institutions hold a key position in this country to the future of nature study on a popular scale. The American Museum of Natural History in New York, the Field Museum of Natural History in Chicago, the University Museum of the University of Pennsylvania and the Academy of Sciences in Philadelphia, the Cleveland Museum of Natural History, and the Buffalo Mu-

seum of Natural Science constitute an educational team that has directed the major developments in the field during the last decade. The business of rallying the loosely organized nature societies and the uninformed organs of publicity around an experimental concept of natural science as a social force is probably too heavy an assignment for any single institution. Yet each of these institutions has been working in its own way to awaken sections of the public to the realization that the study of the natural environment is a study of sane living. Their objective and the materials which they employ have been similar or complementary for a considerable period. If they have failed to reinforce each other in a general plan of action, the obstacles have arisen mainly in the fields of finance and regional responsibility.

When similar circumstances arise in the world of commerce—where a stimulation of the public mind on a national scale is needed—the tendency is for separate institutions to join in the creation of a temporary exposition or in a continuing trade association for common planning in the field of public relations. The idea of an outstanding exposition to which the major institutions might contribute is closer to the functions of museums. In the field of natural history the circulation of interesting exhibits throughout the country can not be carried out in the same lavish manner that is customary in the field of art. A different and more costly technique would have to be employed, utilizing a few carefully planned exhibitions in a limited region. There is, however, no absolute obstacle to a joint exhibition of material describing the American natural environment in synoptic terms. The creation of such an exposition would probably influence the course of nature study throughout the country for a considerable period.

The subject of anthropology provides an interesting example of educational material that might be coordinated into an important contribution to popular learning. The American background, from the anthropological point of view, is that of Indian folk ways and crafts. No one museum could claim to tell the full story either from the point of view of historical development or of the relation of ancient practices to modern customs. Yet the wealth of materials scattered through four or five institutions is sufficiently great to give the public an interpretation of Indian civilization in terms of the finest objects existing in the field. A synoptic presentation of this character would open up the whole subject to popular attention. Its intrinsic attraction to citizens would be unquestionably great. The continuing success of repetitious, inaccurate, and melodramatic moving pictures dealing with the contacts of Indians and settlers is a minor indication of the deep-rooted public interest in the original inhabitants of the land.

A single exhibition of this nature held in a favorable center through the joint efforts of the major museums would react throughout the whole body of natural history museums. Stirred by the publicity consequent to a skillful popular display of this kind, numbers of people, unable to visit the actual exhibition, would show awakened interest in similar materials in their own museums. Societies active in the various divisions of Indian lore might be encouraged to stimulate the communities within their reach by minor displays. Curators of small museums would be given the facts of public response that might enable them to experiment profitably with the display of their own limited materials.

The major point at issue is the comparative helplessness of

single institutions, however well equipped, to revive and maintain a widespread interest in the study of the environmental background. National and local societies, devoted to the various branches of nature lore, are poorly coordinated and lack effective organization for the pursuit of popular education. To a considerable extent governmental agencies have narrowed the field of public choice and freedom through the creation of innumerable authoritative rules. Popular understanding and control of the natural environment require the introduction of some measure of shock tactics by the allied institutions in the field. A rallying point has to be created for the disorganized masses concerned with the topic in order that they may discover principles on which they may combine for action. In the first stages of this movement, a general staff is required for educational planning on a wide scale. Joint action, or at least consultation, on the part of four or five leading museums would seem to present the most hopeful starting point for a campaign to recapture public interest in the relations of men to their basic environment.

Methods of Nature Study

DURING the last fifteen years museums of natural history have concentrated the greater part of their direct educational activities on the training of children of school age. This course of action has permitted museum staffs to make use of existing organizations in the educational field to bring to their halls large audiences with known objectives in nature study. As a consequence, the explanation of primary objects has been simplified through linking museum visits with the formal courses provided by school curriculums. Children introduced to the contents of natural history museums under skilled direction are likely to form interests in nature study that will continue throughout their adult lives. In this sense, the great body of school education undertaken by museums may be accounted a preliminary step to an assumption of similar responsibilities toward adults.

As O. E. Jennings, the Curator of Botany and Director of Education at the Carnegie Museum, has pointed out, it is almost impossible in practice to draw a boundary between preadult and adult education. "The general knowledge of the average person of twenty-five or older is very largely the result of what he learned in rather youthful days. Such a person soon forgets his

high school and college trigonometry or Greek or cytology unless he keeps at it, while his spelling and geography and arithmetic of younger days stay with him. In other words, it seems to me that the effective education of the average adult of middle age or thereabouts is very largely the result of youthful education rather than adult education. I have suggested, and this has brought things down on my head, that such a viewpoint means that we are teaching what is to be the educational equipment of the adult all the way up through the elementary and high school days."¹

One consequence of the emphasis laid on school education throughout the museum world is the acceptance of the school curriculum or its equivalent as the basis for nature study. The necessity for original educational planning based on the visual materials of the museum itself has never been strongly felt. Correctly, perhaps, museums have considered that they should not seek to be independent educational institutions—caution dictates the simpler role of auxiliary to the school classroom and the college laboratory. Where the education of mature persons is concerned, however, the auxiliary nature of museum learning is a handicap. There are no institutions, in the field of nature study at least, where the untrained adult may receive a systemized course of education in his leisure hours. Supplementary aids of the museum in the form of occasional lectures and demonstrations remain supplementary to an uncreated principal.

An educational plan that would permit the continuous training of substantial numbers of adults in well-rounded studies of natural history has not yet been conceived by any museum. The

¹ O. E. Jennings, "The Place of the Natural History Museum in Adult Education." *The Museum News*, 16: 6-7, May 15, 1938.

conception of such a plan might require a measure of revolutionary thinking on educational problems—perhaps new methods would have to be created from visual materials and unacademic divisions of subject matter adopted in order to achieve a workable synopsis for adult assimilation. In any case, the museum would be forced into the forefront of the educational picture as an independent entity, catering to a large section of the community generally neglected by academic bodies.

There is reason to believe that ambitious steps of this nature might provoke criticism from established universities and colleges, which would feel that their educational facilities were being challenged. University extension work has claimed within the last few years to cover many neglected fields of public education. If museum authorities are satisfied that extension lectures cover the fields of natural sciences in as satisfactory a manner as the general public can expect, then they may content themselves with the use of their institutions as auxiliaries to dominant universities. The supremacy of the university in this field, however, may not be taken for granted. Museums doubting the efficacy of extension work along academic lines have both the right and the duty to engage in rival methods of their own choosing. Institutional jealousy on the part of more formal teaching centers should be discounted as an inevitable professional failing. In the broad field of popular education, universities are, through their selective principles and formal disciplines, justly suspect. Scholars employed in different types of institutions should not extend courteous precedence to each other to the point of sacrificing the public interest. The question as to whether the study of natural science by adults can be handled most effectively by museums or university extension divisions is not one to be settled

by academic tradition. Practical experimentation on a major scale by one or more of our great museums is required in order to provide a competitive test of educational agencies.

If the Field Museum of Natural History in Chicago be selected for the sake of example, the adult educational program of a great museum may be viewed as somewhat haphazard. In its *Handbook* for 1938, the Museum claims that "the educational influences of the Museum reach all classes and ages of people. More than one million visitors now view the exhibits at the Museum during the course of an average year—in 1933 there were 3,269,390 visitors, a world's record for any museum. In addition to the vast public reached by the Museum's exhibits, lectures, and publications, the institution's influence is extended to many additional millions each year through its policy of utilizing all worth-while opportunities which are presented for the further spreading of its messages, such as accounts in the press, radio lectures, and motion pictures."

This is a description of a great and evidently eager audience awaiting opportunities to further their understanding of the natural environment. What has the museum to offer them in the form of systematized learning once their imaginations have been stimulated by occasional visits, radio lectures, and motion pictures? In a later section of its *Handbook* the Museum states:

As part of its program for providing adult educational facilities, Field Museum presents annually two courses of free illustrated lectures on science and travel. These are given each spring and autumn on Saturday afternoons, in the James Simpson Theatre of the Museum. Eminent scientists, naturalists, and explorers are engaged to give these lectures, which are illustrated with motion pictures and stereopticon slides. Many thousands of persons attend.

Additional thousands of adult visitors receive cultural development by participation in guide-lecture tours of Museum exhibits conducted by members of the Museum staff. These are given daily, except Saturdays and Sundays, at 3 p.m. On Thursdays the tours are general, covering outstanding exhibits in all departments of the institution. On other days lecture tours on special subjects are offered.

These are valuable services to provide for the general public but they can not be said to constitute an integrated educational program in the natural sciences. The weakness of almost all museum education in this field is that it stimulates, but falls considerably short of enlightening, except in rare cases. There always seems to be an assumption in the background that the public has other sources from which it may obtain a systematized approach to the subject; that the business of the museum is merely to arouse a general interest among the largest possible number of people. In practice, it is untrue that universities, institutes, or libraries are prepared to give facilities for leisure-time study of the natural sciences to the bulk of the adult population. It may be laid down as axiomatic that, if the museum is unable to handle this task, no other institution at present in existence can undertake it with any real hope of success.

Perhaps the provision of systematic educational facilities for all adults interested enough in a subject to devote leisure hours to its study is beyond the reach of even American standards of civilization. Certainly in no other country in the world today would such an ideal be seriously held. The fact remains that educational ambitions of this character are part of the accepted claims of American life. Until they are proved impracticable and unfeasible, institutions dependent on public support are bound to give them something more than lip service.

Practical educational programs on a wholly free basis can be given only on a limited scale, even by the wealthy museums. There is no reason, however, why large sections of the adult public should not be served on a fee-paying basis, even though the amount received covers only a part of the museum's total expenditure. The difficulty in this case is to plan courses of sufficient practical relevance to attract specified groups in the community. Educational planning on a businesslike basis would be required, and it is on this point that museum management is at present deficient.

A few museums, including the American Museum of Natural History and the Buffalo Museum of Science, offer students special courses of a definite social or vocational character on a fee basis. In the case of the American Museum, training courses in natural history for schoolteachers and courses for nurses have been eminently successful over a number of years. Expert imagination could easily work out numerous courses in every department of natural science that would appeal to clear-cut groups in the community. For example, lawyers are a numerous and sometimes solvent group in every city. A museum with a sound department of anthropology could offer courses dealing with the primitive background of legal concepts specifically for the leisure-time education of lawyers. The local bar association probably would assist with the organization of courses of this character and would publicize them. Lawyers with broadened intellectual powers would be a great asset to any community.

An educational program that aims at being self-sustaining in whole or in part from public fees must be based on practical social classifications and interests. The general community consists of people who are most readily approached through their

capacities as housewives, gardeners, fishermen, dentists, dreamers of travel, health enthusiasts, carpenters, and star gazers. Adult education implies that people should be treated as adults, their natural interests consulted, and their freedom of choice in social formations and intellectual hobbies fully respected. Museums have the materials and the scholarship to deepen into true intellectual pursuits the vague interests held by the bulk of the population. At present they lack the bold planning necessary before the public can declare its educational tastes through practical experiments.

In most of the major cities throughout the country, adult education councils have been formed to act as channels through which the community can declare its various needs in the educational field. These bodies would be able to offer museums valuable information on the expressed wants of citizens for learning of specific kinds and also on the question of the rates of fees that might affect the attendance of different types of groups.

Astronomy provides the example of a subject where scholarly material coincides with the hobby interests of large sections of the population. In consequence, the astronomical departments of natural history museums have proved their most attractive educational drawing cards over the last decade. This applies not only to the achievements of magnificently equipped planetariums, such as the Hayden Planetarium of the American Museum, but also to the roof telescopes of minor institutions. In Baltimore the Maryland Academy of Sciences is ill-housed and appears rather neglected from the point of view of funds and public support; but on the roof of one building an astronomical section flourishes which is a true educational center

and which carries almost the whole program of continuous adult learning for the Museum.

The outstanding popular support obtained for astronomical education obviously holds lessons for the educational program of the Museum as a whole. Continuous learning depends on the relation of popular interests to materials collected by scholars. Where public interest is direct, as in astronomy, neither costs nor technical difficulties of scholarship prove serious barriers. In other fields, popular interests are more indirect and have to be brought to the surface through the skillful planning of an attractive curriculum. Thus, anthropology covers portions of the background of law, of religion, of dancing, of sport, and of many other subjects interesting to large sections of the public. Yet, until courses can be presented from museum material, based on the contribution of anthropology to these general interests, the average adult will be unaware of the fascinating link between competent scholarship and the world of practical affairs.

From the point of view of an outside observer, natural history museums seldom seem to be organized, in respect to their internal management, for the dominant purpose of popular education. If business standards were adopted in looking at their administrative structure, they would probably be classified as "production" plants geared to the accumulation of material and its systematic storage. The problem of the distribution of knowledge is left to the secondary and subordinate agencies within the hierarchy of museum control. Neither the board of trustees, the director, nor the senate of scholarly curators can be described, in general, as selected primarily for their knowledge

or skill in the direction of popular education. In consequence, educational planning is not the direct responsibility of the major administrative authorities of the museum, but only of a single department—the division of education. Internal obstacles relating to a lack of cooperation from older departments in the museum, combined with a perennial shortage of funds for strictly educational purposes, discourage ambitious educational plans embracing the total activities of the institution.

Sooner or later museum authorities in every community must decide whether adult education is to become a direct and perhaps dominant responsibility of the central management of the museum or is to be relegated to the sphere of public relations to function as a legitimate means of attracting support to the true work of the institution in the field of detached scholarship. The tendency toward elevating educational objectives to a primary place in museum administration has become so marked as almost to constitute a trend. The American Museum of Natural History, under the presidency of F. Trubee Davison, is providing leadership in the task of administrative organization for educational planning that is likely to influence the whole body of American museums. It would be invidious to attempt to select by name the distinguished directors and curators throughout the country who have concentrated their attention on educational administration. A partial list of the institutions they direct in the natural history field would include besides the American Museum, the Academy of Natural Sciences of Philadelphia, the Cleveland Museum of Natural History, the Buffalo Museum of Science, the Carnegie Museum at Pittsburgh, the Colorado Museum of Natural History, and many others outside the field of the writer's observation.

The fact remains, however, that the normal administration of natural history museums is carried on by bodies selected for reasons other than their capacities as educational planners. The immediate problem in the furtherance of popular education in nature study is one of internal organization in museum administration. Who is to draw up an integrated curriculum for adult study, and how can the planner obtain the necessary authority to utilize the full resources of the museum in carrying out the plan? Difficulties do not lie in any shortage of competent personnel for this task but rather in administrative questions of coordination, consultation, and the acceptance of joint objectives by all departments of a museum.

The first administrative step in museum education is a clear budget apportionment. Trustees and directors must come to definite decisions concerning the proportion of funds to be devoted to research, field work, care of materials, and popular education. The educational budget should then be entrusted fully to a responsible body, say a director of education acting as an executive officer for a senate of curators meeting under the chairmanship of the museum's director. Curriculums should be created for the entire museum by a representative curriculum committee and should be subject to discussion and approval by the whole senate of curators. In brief, natural history museums can adopt educational objectives only to the extent that they organize their administrations along the accepted lines of educational agencies.

The ancient dispute as to the comparative value of research work and instructional activities seems to plague the natural history museums more than would seem necessary. Finance is the real point at issue. Museum authorities grudge withdrawing

funds from the support of scholarly research in order to initiate experiments in popular education. The question is not one of philosophical values, or even institutional theory, but rather a matter of practical common sense and common integrity. Where funds exist from endowments, public taxation, or subscriptions for purposes of scientific research, they should be wholly employed for these ends. When the museum wishes to raise money from the public it should state clearly what portion of money it intends to spend on research and what portion it seeks for the dissemination of direct information. At present, some museums might be accused of concealing the issues in their general appeals for funds. The uses of the museum primarily as an instrument of popular education are stressed, when, in fact, a large portion of the budget is devoted to research activities. Responsibility for this type of social honesty rests squarely on museum trustees. The community should hold them strictly accountable for frank and comprehensive statements of the expenditures of their institutions on various types of activities.

Sound popular education depends for its development on a capacity to pay its own way, either in terms of direct costs or indirect public support. Research work has every right to defend its own funds against the encroachments of any unreal, parasitic movement. Reasonable precautions, however, must be taken by responsible officials to see that funds used for scholarly research were intended by the donors for that purpose.

Many existing museum activities in the field of popular relations are so attractive that it is difficult to judge them by sober academic standards of continuous learning. Without doubt, popular learning has a deep need of educational instruments

that stimulate the imagination and enlighten the mind without requiring the tiresome effort of memorizing data or the pains of logical analysis. Psychologists are still disputing the place of intuitive and imaginative understanding in the field of human learning. Common lore, however, has long recognized "revelation" as a practical avenue to an awakening of the intellectual and spiritual powers. Individual lectures that provide the untrained public with a sample of some unexplored intellectual field may properly be classified as "revelatory" education. To select at random, the Ludwick lectures, given at the Philadelphia Academy of Sciences, include the following enticing titles:

Caves and Cave Life, Haunts and Habits of Creatures of Perpetual Night. Illustrated with colored slides.

China, Mongolia, and Japan. Illustrated with moving pictures and slides.

The Porpoise Hunters of Western Nova Scotia. An account of the last of the Indian hunters who go out on the ocean in canoes after sea mammals. Illustrated with colored moving pictures.

Frog Musicians. Vocal and other habits of frogs and toads of the Eastern United States. Illustrated with lantern slides.

South African Bushmen and their Neighbors. An Academy Expedition to Southwest Africa. Illustrated with moving pictures and slides.

Wings over the West. Birds and animals of Western United States. Illustrated with moving pictures.

Motion pictures, with or without explanatory lectures, present one of the most tempting developments in popular education in the natural sciences. Most active museums of natural history possess lecture theatres where they can readily be shown. Their popularity is unquestioned, and no museum fortunate enough to be able to offer a frequent program has ever had cause to complain of any lack of audience. The major obstacle

to this educational development is an acute shortage of films suitable for free circulation. The work of experts in the technique of nature photography is almost always a labor of love. It requires endowment, but, unfortunately, it has not yet caught the imagination of any educational philanthropist.

Radio broadcasts are becoming increasingly popular as a means of attracting attention to the educational facilities of natural history museums. Information about nature, particularly when related to the area covered by the broadcasts, constitutes news and as such conforms with the customary pattern of radio programs. From the educational point of view, radio is, in general, a difficult medium. Broadcasting corporations lavish skilled attention and money on commercial programs for entertainment purposes, but grant the educator, as a rule, merely the mechanical facilities of the station. In consequence, the listening public finds marked technical deficiencies in many educational programs and is apt to condemn the subject matter as intrinsically uninteresting. The experience of the British Broadcasting Corporation, with its series of Nature Talks, however, has shown nature study to be eminently suited for wide popular consumption as radio material. In Britain, of course, the same amount of money and production skill can be devoted to the broadcasting of natural history as to forms of lighter entertainment. Advertising revenues and commercial sponsors are not involved.

On the border line between recreation and education stand the nature trails and trailside museums developed by many institutions during the past decade. The Cleveland Museum of Natural History pioneered in this field, and its initial work has had an interesting effect on the management of state and national parks. Partly with the aid of W.P.A. funds, numerous

small park museums have been created recently to serve as educational guides to the surrounding areas. In New York the Trailside Museum maintained at Bear Mountain by the American Museum of Natural History is one of the recreational show places of the metropolitan area.

Field excursions conducted by museums for large or small groups represent another form of experiment in linking recreational activities with occasional nature study. The extension of the museum into the actual countryside is highly desirable from the viewpoint of popular education. The weakness of the movement, however, is the lack of connection between this type of "laboratory" work and systematic study organized by museums for definite groups. Nature trails or field excursions have to be simplified to the point where they will be comprehensible to the most casual participant. The recreational character of this movement, accordingly, is emphasized to the detriment of its serious educational content.

The future development of laboratory work in the countryside will depend on the success of natural history museums in organizing systematic programs of continuous study for specific groups. This may be said to apply to almost all existing educational activities of museums of this character. Each method—whether lecture, guided tour, motion picture, radio, or field excursion—taken by itself is generally admirable and skillfully developed. What is lacking is a general educational plan for adults that would make use of these various instruments in the continuous instruction of different groups.

Nature study means different things to people in differing vocational and social niches in the community structure. Unless museums are prepared to face the task of interpreting the basic

environment in terms of existing social patterns, they are unlikely to become centers of spontaneous popular education. Universities have long learned to form various schools corresponding to the vocational needs of the moment. They may be considered from some points of view to have gone degrading lengths in this direction in an unbridled hunt for students and fees. Natural history museums probably can develop their adult educational functions in a more dignified manner. If it is the ambition of the museum to become a school for society in nature study, it must examine the community realistically and deal with existing vocational, recreational, and intellectual groups on their own terms.

Science, Industry, and Commerce

THE vitality of the modern museum movement is perhaps best evidenced by the development of museums of science and industry. Institutions such as the New York Museum of Science and Industry, the Franklin Institute of Philadelphia, the Museum of Science and Industry in Chicago, and the Edison Institute at Dearborn were established to bring present-day technology within the range of museum education. They have never served merely as repositories for objects gathered over a long period of time under varying circumstances. They are, accordingly, the products of a belief that a museum is a proved instrument of educational exposition—that the existence of a museum technique is more important than any chance collection of historic objects. In fact, science museums may be said to create the objects in their collections through the act of ideological arrangement. Their rapid growth in material strength and public favor during the last decade constitutes proof that the museum is an educational tool useful in ever-widening fields of general interest. To some extent, these new institutions have overcome the timeworn prejudice that museums exist as custodians of things rather than as prophets of ideas and hosts to questing minds.

Modern technology is not yet ready for preservation in the dust-proof case of historical curiosity. It is, unfortunately, a grim business reacting unpredictably on the lives of nearly everyone. Museums dealing with this subject are engaged in handling social realities that overtax the powers of politicians and industrial leaders. Yet the approach to technology through the museum is a necessary prerequisite to social control over mechanistic processes. Without some measure of popular understanding of the major factors involved, the relations of men to machines can never be properly resolved within the framework of social democracy. The enhancement of understanding is more an educational than a governmental undertaking. However, new techniques of education are required in order to reach all classes of the community in terms of their active social occupations.

In a recent issue of the journal of the British Workers' Educational Association, B. Woolf writes:

The plain fact is that science is releasing vast uncontrolled forces in a world that is not organised to receive them. . . . Lack of planning, and of the social understanding which must form the ground work of any plan, makes science an incalculable, disturbing element often doing harm, instead of a mighty social engine for betterment. The remedy is simple in principle, though very difficult in concrete application. It is first to lay bare the social relationships of science, to tear off the veil and drag them into the light, and then to create the necessary social machinery to utilise for man's welfare the gifts of science.¹

This point of view can be translated into terms of either political action or social education. A leaflet of the British Trade Union Congress, "Men or Machines," emphasizes the political

¹ B. Woolf, "Science and Society." *The Highway*, 30: 162-65, April, 1938.

aspect: "The Luddites smashed machinery because it threw men out of work. The march of scientific invention cannot be stopped, but it can be controlled. Not by one man, not by a score, but by the organised efforts of workers generally."

Up to the present time, the American attitude has favored universal education as an instrument of social control in preference to the method of class organization around political principles. America has favored control through understanding, though it can hardly be said to have implemented this process. In consequence, trade-union discipline and political action, long common to the sister democracies of England and Australia, are being advanced here with increasing strength as the readiest solution to problems of social adaptation to technological change. The relative value of political versus educational action in the reconciliation of science with society can not be debated in this place. It is important to note, however, that the educational approach no longer appears to be strongly emphasized by official organizations of workers.

An interesting contrast exists between the organization of the mechanics' institutes in England and America during the nineteenth century and the modern museums of science and industry. Both may be said to have had the same general objective—the familiarizing of large sections of the population with the application of the principles and discoveries of science to the routine of their occupational and social lives. The mechanics' institutes, however, represented the effort of important occupational groupings to train themselves in the new scientific outlook as a means of protecting their independent status in a society constantly subjected to technological changes. The movement dwindled, partly because its educational techniques were too

formal to interpret modern science in social terms and partly because the growth of trade unions offered methods of social control that were apparently speedier and more efficient.

Museums of science and industry, on the other hand, have arisen outside the field of occupational divisions. They assume that every section of the population has an equal interest in technological science because all alike are consumers of the products of a scientific culture. Perhaps they represent a reaction against hasty beliefs in the control of the scientific environment by legislative action based on mass organization. In any case, their bias seems definitely in favor of expounding the "wonders" of science as a force detached from social organization.

From the point of view of visitor interest, the three major science and industry museums rank high in the museum world. Moving models that can be operated by visitors themselves and the general arrangement of exhibits show a deep understanding of popular psychology. In educational terms, however, they appear to be still at the stage of the commercial exposition. Their general plan of exhibition is that of an encyclopedia of science—an amazingly well-illustrated encyclopedia—but still a reference volume rather than an educational textbook. Large crowds are attracted to look at the fascinating illustrations, to deepen their understanding of specific matters within their knowledge, to gain a general impression of the wonders of science. Yet probably few visitors could describe the plan of any science museum after several visits or show how it related to the technological problems of society.

In Chicago the Museum of Science and Industry has magnifi-

cent buildings in process of reconstruction and a considerable endowment for exhibition purposes. Because of the temporary nature of its exhibition halls, its general educational policies have not been crystallized fully. The Museum has of necessity concentrated its efforts on making scientific phenomena attractive to the public. This preliminary step could not have been avoided as no data existed, outside the field of practical experiments, on the means through which scientific facts could be communicated to an untrained audience by direct visual means. The success of the Museum as a demonstrator is now assured, and the stage has been reached where scientific phenomena must be interpreted rather than merely displayed. With the opening of the largest galleries on this continent, devoted to the applied sciences, the Chicago Museum is faced with difficult decisions in relation to educational philosophy.

Mechanical science is a curious toy until it has been clearly related to human affairs. A chemical process, for example, has little significance to an uninformed spectator when shown as an isolated event. The same process, however, if demonstrated as a step in the manufacture of some article of common use, possesses a greater degree of meaning. When the process is further related to social events by illustrating its effect on employment and the utilization of new materials, educational values appear that are applicable to the whole community. There can be no satisfactory educational treatment of the applied sciences until they are placed in proper perspective as means to social ends.

One method of educational display is to sketch the historical growth of the practical sciences. The Kensington Science Museum in London follows this procedure in a general way. A study of the evolution of the products of civilization and the tools

whereby they were made is a valuable contribution to knowledge. It remains, however, a specialized contribution attractive to students of particular skills rather than to a general audience. Materials for this pattern of evolutionary display are naturally not so plentiful in the United States as in Europe. In individual instances exceptionally fine exhibits may be arranged in this fashion. The Franklin Institute in Philadelphia boasts a historical account of the mechanical process of printing, fascinating as a voyage of ingenious discovery and romantically relevant to the name of Benjamin Franklin. Apart from exceptional cases of this kind, the historical approach to the mechanical sciences strikes a false note in the American scene. Even in England, the Kensington Museum has omitted the greater part of its educational message by neglecting the social consequences of mechanical discovery in the past as well as the present. A true history of the machine should explain the attitude of the Luddites, the machine smashers, as well as the achievements of the inventors.

Another possible approach is along vocational lines, employing the visual exhibit to illustrate basic principles that lie beneath the everyday use of tools in the innumerable skilled trades. This method has been used to a considerable extent by American museums of science. In Philadelphia the Franklin Institute receives many visits from organized groups of employees of oil corporations. For these groups the Museum arranges special lecture tours and demonstrations that give the members insight into the basic processes of their industry. Limitations, however, exist to the spread of this type of education. The claims of the general public sooner or later must be weighed against methods of arrangement that would appeal to the separate interests of skilled trades.

The New York Museum of Science and Industry is engaged in an outstanding effort to analyze the character of its audience through skillfully prepared questionnaires presented daily to sample groups of visitors. In time the representative type of audience naturally attracted to various kinds of display should become known. Educational plans can then be drawn up based directly on fulfilling the needs of a known class of visitor. Up to the present time vocational groups organized as such have not proved to be a very important factor in the Museum's analysis of its visitors. General curiosity concerning the sensational elements in scientific advance appears to be the strongest motive attracting audiences from every occupational and age grouping to the New York Museum. The purpose of a scientific fair is well served through constantly changing exhibitions arranged with dramatic skill.

If the linking of scientific discoveries to social organizations is accepted as a primary objective of science museums, the problem of educational policies can be viewed as a matter requiring experimental treatment over a considerable period of time. There is no cut and dried story of science that could be unfolded through a visual panorama enlightening to the casual observer. Instead, a series of complicated relationships exists, worked out incompletely as yet and perhaps only in a few instances, dealing with the *effects* of scientific advance on the lives of men and women. However partial, an understanding of these relationships remains essential to intelligent control of the social environment. It represents one of the major gaps in adult education at the present day. Unfortunately, the necessity for this type of education does not make its fulfillment any simpler. Science museums are engaged in exploring fields largely neg-

lected by institutions of formal education and misleadingly charted by many selfish interests in politics and commerce.

Granting the need for experiment and patience in the development of educational policies in this sphere, certain tendencies already in existence merit critical examination. In the first place, a natural temptation exists to make science assume a magical role in relation to humanity. Audiences can perhaps be most readily awakened by exciting their admiration and wonder. Exhibits arranged to glorify chemical and mechanical achievements flatter the innate vanity of the human species. When a whole museum, moreover, is created around the principles of the "marvels of science," the visitor is assaulted with a point of view that approaches perilously close to propaganda. Unsolved problems, temporary hypotheses, gaps in the necessary linkage of knowledge are glided over in a manner that destroys true perspective in the mind of the untrained observer. Glorification becomes the principal business of the institution, and the public is cajoled in place of being educated.

The hard fact must be faced that science is a destructive as well as a constructive force. Popular education in the field requires a fair statement of the failures and dangers of scientific discovery in order to balance a roseate picture of unswerving progress. Science museums perhaps feel that a critical analysis of their subject matter lies outside their sphere. This is even more true of industrial exhibits, where modern industry is presented only in the character of a fairy godmother to the human race. Unbiased, critical analysis is the major attribute of scholarship, lacking which no institution can claim educational status. The presentation of one side of a picture is sometimes more dramatic and appealing than a cautious, well-rounded display. It remains, however, an exaggeration, misleading and harmful, unless cor-

rected by the educational integrity of outside forces. Museums of science and industry are apt to accept this supplementary role in education. They assume that other institutions are responsible for the creation of balanced perspective in the minds of the public, with the consequence that they feel free to rhapsodize in favor of the marvels and beauties of scientific achievement.

An argument might be advanced that science museums are exponents of mere processes of technology and have no wider responsibilities. Basic principles of scientific thought and the social consequences of industrial development, accordingly, should be held outside their spheres of influence. A limitation of this nature would serve to avoid difficult educational problems, yet it could hardly be accepted by major institutions seeking public support for ambitious plans of widespread service to the community. In particular, it might be said that the Museum of Science and Industry in Chicago, the Franklin Institute of Philadelphia, and the New York Museum of Science and Industry have advanced well beyond the stage of technological display rooms. Having commenced the process of relating scientific development to social happenings, they are fated to proceed even further along these lines. Their neutrality has already been compromised, and their future choice lies between the educational task of critical exposition and the propagandistic role of scientific fairs.

The historical evolution of industrial and technological processes is probably best presented by a single institution in each country. Museums devoted to this end are essentially reference halls of cultural history, attracting a constant stream of pilgrims from all quarters. The task of building representative collections to illustrate the theme is too great to permit of extensive dupli-

cation. In America, the Edison Institute Museum at Dearborn, though as yet uncompleted, promises to fulfill the role of a major storehouse of technological history. This Museum covers an area of approximately eight acres and has three main divisions dealing with the processes of agriculture, manufacture, and transportation. The guiding theme carried out with expert skill and lavish attention to detail is the evolution of the tools of mankind from earliest times to the present day. No attempt is made to link the various stages of toolmaking with corresponding developments in human culture. The Museum is dedicated to a detached study of human ingenuity in the mechanical arts. The following quotation from the guide book clearly illustrates the Museum's character and purpose:

The *agricultural* section contains farm implements arranged in their evolution, the displays being placed to trace the growth of a season's crop. Beginning with implements used in preparing the soil, the sequence shows implements used for planting seed, for cultivating, for harvesting and, finally, for the actual preparation of the crop for market.

Here is a rude wooden plow of the Asiatic type, with a roughhewn log as its beam, a metal-tipped share and the jaws of oxen as its mould-board; here are plows with mouldboards sheathed in saw blades, and patented plows—walking and riding—from the Civil War period on, with shares of cast iron and, finally, of chilled steel.

Many planting and harvesting devices, eloquent of the ingenuity of early American farmers, are shown; scythes, from the first rough metal blades affixed to a tree branch to the cradle scythes—and their mechanical successors, the mowing and reaping machines.

Henry Ford's imagination and generosity have unquestionably created a valuable educational structure—a worthy goal of the pilgrimages made by hundreds of thousands of his fellow

citizens sharing his keen interest in the development of tools. The Edison Institute, however, can not serve as a model to museums of science and industry located in great cities. Their task is to interpret scientific discoveries in terms of the social organization through which men and women live their everyday lives. As instigators of popular education in the scientific factors of civilization, they bear a responsibility for critical exposition that can not be fully satisfied through presentation of a bare chronology of discovery.

Museums of commerce are a natural corollary to those of science and industry. Yet there is only one such museum in the United States—the Philadelphia Commercial Museum. From the educational point of view, the subject of commerce appears well suited to museum presentation, particularly with reference to the field of economic geography. Through force of circumstances in the course of its development, the Philadelphia institution has become a remarkable reference organization for inquiries concerning the raw materials of commerce from all over the country. A considerable part of the energies of its staff are directed toward providing information as to the availability of required types of raw material and the likelihood of markets throughout the world for specific products. This service is conducted on a national and even an international scale, giving to the Museum some of the functions in America carried out in Britain by the Empire Marketing Board.

The resources of the Museum have not yet permitted it to experiment in exhibition policies aimed at the education of the widest possible public. Through a system of lectures and guided tours, school children are given visual aid in the understanding of economic geography and the trade routes of commerce. Equal

facilities for the adult public would necessitate a costly exhibition policy utilizing dramatic dioramas and many resources of modern museum technique beyond the immediate powers of the Philadelphia institution.

The whole subject of the movements of commercial products from raw materials to finished articles is one that demands careful public exposition. Education in this field is an underlying necessity to the formation of intelligent political and economic viewpoints by the majority of citizens. Semiprivate museums, such as the Philadelphia Commercial Museum, are naturally inclined to render particular service to their direct supporters—the community of businessmen. Popular information concerning commercial resources, markets, and transportation should flow from at least a semipublic body. State museums are to a considerable extent designed for this purpose.

It would seem a common-sense principle that the commercial resources of every state, in terms of raw materials, power, and markets, should be clearly diagrammed for the information of all residents and visitors. Modern museum technique would make the task readily practical if a modest endowment were provided for suitable buildings and a skilled staff. Yet few state museums are given opportunities by their legislative masters to make any attempt to fulfill this necessary duty. For example, the California State Exposition building in Los Angeles possesses many halls filled with samples of the state's produce. With the exception of sections devoted to the tourist industry, modern museum technique is almost wholly neglected. Educational purposes that might be achieved in terms of economic geography and practical evaluation of commercial resources are sacrificed in favor of unimaginative vistas of pickled peaches.

The creation of state museums describing the commercial resources of their regions along scientific and educational lines may have to await an organized public demand. Political forces are willing to tolerate and even aid institutions, such as the New York State Museum, devoted to the exposition of natural resources; scholarship and integrity in this field can effect little harm to the various contending political groups. Commerce, however, is another matter, and popular education through a scientific analysis of a state's true commercial wealth might throw unwelcome light on many curious corners of community life.

Adult education, however, is something more than an intellectual opiate for the governed masses. It represents a definite method of social control, an essential framework for political democracy. Where opposition to its full employment exists or where a potential field has suffered neglect, it appears to be the duty of the public to agitate for its rights. Museums of commerce are useful instruments of popular enlightenment in an unnecessarily obscure subject, and the political state is under obligation to provide the economic information that could be dispensed to its people by this means. Citizens can hardly expect private philanthropic bodies to bear the burden of services neglected through their own lethargy.

History as a Hobby

POPULAR demand has played slight part in the initial creation of museums. Museums of art, of natural history, of science are, in general, the products of the cultural enthusiasms of minority groups; of the anxiety of the collector to spread interest in his specialty among the indifferent many. A notable exception to the rule is provided by the museum of history. In this case, the passion for relics is a deep-grained habit of the popular mind. Collections of this character answer a need common to every political society that has endured a few generations. Their existence might be termed a popular phenomenon, while their arrangement and use depend on the skill of particular learned bodies.

In America the custodianship of historical relics has devolved for various reasons on the numerous historical societies that have flourished in this country since the founding of the original Massachusetts Historical Society in 1791. These bodies, however, are primarily research associations, and their activities as exhibitors and guardians of popular collections have to some degree been forced upon them. Arthur C. Parker, the Director of the Rochester Museum of Arts and Sciences, has stated the

difference between the historical society and the museum with considerable force:

The fact that there is a wide difference . . . apparently entirely escapes the minds of most supporters of such institutions. . . . A historical society is an organization devoting itself to the task of recording, preserving, interpreting, and publishing historical records; while a museum is an organization devoting itself to an orderly exhibition of ideas illustrated by objects, duly classified according to their nature and grouped, so far as possible, in natural and logical relations. . . . The historical society is concerned with records and writings of and about men and events; the museum is concerned with exhibiting actual objects and explaining their relations and meanings.¹

Museum practices and purposes are closer to the needs of popular education than research activities and, accordingly, historical societies have difficult decisions to make in regard to their future responsibilities when they assume the sponsorship of a museum collection. At the present moment there are at least three historical societies that have given priority to the direct dissemination of popular learning in the historical field. The Chicago Historical Society, the New York Historical Society, and the Louisiana Historical Association concentrate their major energies on the maintenance of educational museums. These institutions are dedicated to the furtherance of the historical background as an immediate instrument of social cohesion. They seek to give practical point to the words of Sir Frederic George Kenyon:

There is a tendency in times of upheaval to break loose from tradition, whereas salvation is to be found in adherence to tradition. Not in a blind adherence, nor in a denial of progress, but in an ordered

¹ Reprinted from Arthur C. Parker, *A Manual for History Museums*, by permission of Columbia University Press.

progress based upon tradition. And if this is to be secured in times of crisis, when it is most needed, it must be because the habit has been formed in times of quiet. A visit to a museum will not by itself quench a revolution. . . . Every form of instruction or experience which teaches men to link their lives with the past makes for stability and ordered progress. Hence the value of the teaching of history, and hence also the value of those institutions which teach history informally and without tears.²

The opposition between the idea of popularizing existing knowledge as a means of direct social control and the concept of gathering and sifting knowledge for the use of scholars, legislators, and other specialized groups plays a distinct part in the organization of historical societies at the present time. The former function lies most clearly within the boundaries of popular education, while the latter tends toward vocational education of an academic or political nature. In general, a modernized museum is the hallmark of a society that has decided in favor of concentrating its energies on the promotion of adult learning.

It is perhaps dangerous to dogmatize on the comparative social usefulness of these two courses. Each in its own time and place can claim a measure of priority, and many societies cling to an admixture of methods that should permit the rapid dominance of the educational form most in demand. The Minnesota Historical Society, for example, is one of the most active and efficient state societies. Its work includes not only the collection and arrangement of historical records but also their utilization for social and political purposes. As an efficient reference library and historical guide for busy legislators and officials, this institution may be ranked as an important part of the governmental

² Frederic George Kenyon, *Museums and National Life*, p. 24-25. Clarendon, 1927.

machinery. Its publications, however, go beyond this sphere and provide hundreds of Society members and subscribers with invaluable material for deepening their understanding of the social and economic background of their state. Besides giving this service, the Society acts as a news bureau and distributes to the newspapers throughout the region interesting items from its files relevant to state history. This latter function borders closely on the field of popular education.

The maintenance of a museum is not the major activity of this Society, though its exhibition halls compare favorably with any outside New York, Chicago, or New Orleans. It might well be argued that this institution is transforming itself from a narrow research body into an instrument of social education along cautious and pragmatic lines. The primary need in its territory has been to make historical data available as a basis for social action. Legislators and officials had first to learn the practical use of scholarly records before the general public could be shown the value of deepening their understanding in this respect. Perhaps the time is close at hand when the admirable achievements of the Minnesota Society in interpreting the archives will create a popular demand for the widest possible dissemination of that knowledge. In such a case, the Society already possesses the internal organization necessary to enlarge its museum into an important educational institution.

A similar approach to historical education has been followed by the Wisconsin Historical Museum. The principal emphasis has been laid on the preparation of material describing in scholarly detail the background of the state's history—social, economic, and political. The work of Joseph Schafer in compiling a model Domesday Book for some of the state's counties is a noteworthy example of the practical application of acute learn-

ing in local history to the social needs of the community. A fortunate arrangement whereby the library of the University of Wisconsin and the library of the Historical Museum are housed in the same building at Madison affords this society an ideal location for a museum. An encouraging stream of visitors to the state capital passes through exhibition halls arranged to give a comprehensive view of state history.

The historical societies of Minnesota, Missouri, Ohio, Pennsylvania, Virginia, Wisconsin, and several other states can rightly boast of scholarly material well prepared and widely distributed throughout their regions. Yet there are several hundred historical societies within the borders of the United States, and the standard of their educational contributions can not be described as uniformly high. "Not all historians," writes Julian Boyd in *The American Historical Review*, "have been so gentle as Sir Walter Scott in ridiculing the Jonathan Oldbucks who 'made plans of ruined castles, read illegible inscriptions, and wrote essays upon medals in the proportion of twelve pages to each letter in the legend'. The early reports of the American Historical Association contain much criticism—sometimes scathing but always justifiable—of the work and publications of local historians and local historical societies. One of the staunchest and most scholarly friends of local historical activity recently said that 'of all categories of historical writing in America, county histories are probably the worst'; and it was a president of the Massachusetts Historical Society by the name of Adams who declared that half of the publications of American historical societies could be swept from library shelves with no appreciable loss to learning."³

³ Julian P. Boyd, "State and Local Historical Societies in the United States." *The American Historical Review*, 40: 10-37, October, 1934.

It is doubtful whether more than a select few of the hundreds of historical societies can engage profitably in extensive research and publication. Museum exhibition offers the smaller societies an outlet for their energies, perhaps better fitted to their available talent and certainly of more direct value to the community. There were four hundred and fifteen historical museums listed in 1930, and this number has been rapidly increasing because of the conversion of many historic houses into museums during the last decade. In his excellent survey of historic house museums Laurence V. Coleman says: "About half of the four hundred old houses now open to the public are owned by societies, and of these about half—or more than a hundred—are owned by *historical societies*. . . . Local historical societies seem to have taken a new lease of vigor from the task of administering historic houses, and many are now concentrating on this specialty."⁴

The task of managing a museum of history or a historic house museum lies well within the powers of an active society; it affords the society stimulating contact with the public and provides immediate pragmatic tests of public interest and approval for its activities in the collecting and arrangement of material. Since the days of the Venerable Bede the English-speaking peoples have formulated their social organization with scrupulous respect to historical precedents. Custodianship and interpretation of the ancient records have been a social function carrying powers and responsibilities of considerable moment. The liberties of individuals, the basic legal and political framework of American society, are historical formulations. The habit of the native English of agitating for their "ancient liberties" was carried over to the American colonies in an exaggerated

⁴ Laurence Vail Coleman, *Historic House Museums*, p. 26-27. American Association of Museums, 1933.

form. In particular, the writings of Sir Edward Coke, *Coke on Littleton*, influenced the colonists to demand measures of freedom they honestly believed historic to the English system. The fact that Magna Charta and other great records could be twisted in the mind of a subtle lawyer to fit immediate political ends was not yet apparent to God-fearing farmers and traders.

It is unwise to ignore the power of the historical precedent to excite the public mind even in the twentieth century. The excesses of German rulers in using ancient myths of imaginary Aryans and "heroic" Teutons to enslave the minds of an industrial nation are no longer merely ridiculous. They have been considered successful enough to be imitated by the astute Mussolini and will probably become the fashion in petty autocracies for many a decade. To some extent the control of political traditions by the professional scholar and constitutional lawyer is responsible for public susceptibility to historical hysteria. No minority class within the community can be trusted with a monopoly of traditional lore. Sooner or later it will be bribed or intimidated into perverting this mighty weapon to the propaganda uses of the ruling groups.

The place of historical societies in a free nation is that of a repository of tradition where the people may see and judge for themselves the facts relating to their origin and growth. Obviously, a function of this type requires the use of the most effective means of visual education yet evolved by museum technique.

Among the leading history museums in the country the expository faculty has been developed more fully than the critical. The Chicago Historical Society has one of the most comprehensive and well-arranged collections of material illustrating

the various stages in American history. A tour through this museum leaves the visitor with vivid impressions of the flow of events that have created the present pattern of national organization. To some extent, however, the exhibitions remain supplementary to an elementary school-book interpretation of history. Costumes, relics, and documents are arranged to emphasize a conventional story rather than to reveal the difficulties and perils encountered in each period of national growth. It is difficult to conceive how the Chicago Society or any other institution covering the field of national history in a single collection could avoid the conventional interpretation; yet the danger of becoming a shrine for objects rather than an educational instrument is present in every history museum where the balance of critical appraisal is weighted in favor of emotional glorification. In the strict field of popular education, however, it may be said that the adult residents of a great city possess a high level of ignorance concerning the most elementary facts of national history. A museum, such as that of the Chicago Historical Society, can operate for many years on a simple noncritical plan of exposition and still be supplying basic facts concerning which many thousands of visitors were totally ignorant.

The United States National Museum at Washington, under the direction of the Smithsonian Institution, acts as a major reference museum in national history. No interpretative account of its material in terms of political events or economic consequences is sought by the Institute. From the educational point of view the Museum aims to enrich the knowledge of those who already possess the key to the proper continuity of events; for the less well-informed, it is content to serve as a shrine where historic relics may be seen and revered.

The bulk of the museums of history deal with subject matter

more limited in scope than the whole field of national history. Regional, state, or city history provides material more suitable for educational treatment within the limits of a single museum. The use of carefully executed dioramas enables institutions like the Museum of the City of New York and the Milwaukee Public Museum to display vivid accounts of the growth of their communities in brief space. These models possess educational limitations, analogous to those of the historical novel or drama, yet they present the continuity of development in a powerful manner.

In the sphere of the social history of their regions, museums in general lack a well-knit plan of presentation. Divisions relating to costume, furniture, transportation, historic personages, silverware, and many other subjects are created almost at random in accordance with the material accumulated by the institution. Individual displays, while in general skillfully and attractively arranged, do not always convey a concise educational message in relation to the general pattern of the museum.

Before the museum of history can claim that it is accepting its full educational responsibilities, it must be prepared to use its materials for a critical analysis of the historic background of the region. This is perhaps a somewhat difficult step to take, necessitating acute scholarship, skilled exhibition technique, and a measure of disregard for some of the conventional hypocrisies of the community concerning its past. The point remains, however, that a museum dedicated to the mere glorification of ancestral affairs resembles a Confucian shrine rather than an honest educational institution. Real popular concern for these institutions can not be expected until they attempt to relate historical records and relics to an understanding of the full

background of our present social structure. An overscrupulous desire to avoid unhappy memories or controversial topics robs popular education of its true *raison d'être*—the need of the community for honest understanding of its social environment.

When a museum is able to house a collection of historical objects in a building of equal historic charm, an educational plan of arrangement becomes a less pressing necessity. The Cabildo Museum at New Orleans, primarily a state institution, attracts hundreds of thousands of state residents and tourists to savour the historic atmosphere of old New Orleans. Here history becomes a matter of taste, and the impressions received in the Napoleon room, the Huey Long exhibits, or the slave cells are none the less deep because they lack the touch of critical analysis and integration. In the life of every people the historic monument plays an important part in creating the feeling of continuity, even though the relevant facts concerning the linkage between present and past remain unstated.

Though history museums in America have generally to combine the roles of historic monuments and educational institutions, the two functions are really disparate. Where the monument or relic would seek to create feelings of reverence and deep admiration, the educational institution should be on its guard to analyze and describe historical materials in terms of social perspective. This antinomy of functions plagues the majority of history museums. A scholarly body, such as the Henry E. Huntington Library and Art Gallery of California, can resolve the difficulty by exhibiting documents—records relating to the formation of the Constitution, for example—in a way devised to illustrate underlying social and economic factors

that influenced the consummation of the union of the states. In order to achieve this end, original manuscripts had to be selected and arranged with scholarly skill, and a masterly guide to the collection composed by a famous authority. The final achievement blended the factors of reverence for historical relics with an intellectual idea of critical analysis in terms of social values.

From a strictly educational point of view there are few museums of history at present that could be trusted to convey an account of national or regional history to an untrained visitor without omitting factors of essential importance. In order to cover a subject thoroughly a museum would have to limit itself carefully to narrow periods and regions or risk filling in what it lacked in original material with photographs, models, and dramatic interpretations. While the use of the history museum as a mere repository of relics and records frees it from controversial issues of present-day life, it also weakens its basis of popular support. If the community were granted interpretations of local history relevant to everyday affairs, the museum and the historical society would find themselves in the forefront of social action.

Since the appearance of the automobile age, the average American has learned the custom of making pilgrimages. The historic houses of the nation, properly restored and stocked with relics, provide the opportunity of disseminating useful information on social and cultural history among the millions of aimless automobilists. In order to make these delightful beauty places into educational factors, the principal requirement is that their existence should be known to the automobilist. Unfortunately, the four hundred historic houses at present being used as museums lack a central organization to plan the

necessary publicity for this purpose. Oil corporations controlling chains of service stations, automobile associations, chambers of commerce, tourist bureaus, and other bodies would probably be willing to cooperate in making known through maps and by other means the historic houses in their regions. This work, however, ought to be done on a national scale, and the historic house museums lead too separate and individual an existence for joint action.

It is regrettable that these institutions should lack the means to make their existence known on a nation-wide scale. Their appeal is often felt more strongly by visiting automobilists than by local residents, since no small part of their charm for the visitor lies in the act of pilgrimage and discovery. Educational programs designed for the community are, in general, beyond the powers of their limited staffs and funds. The main objective must always be to create a shrine where the correct atmosphere of the historic period or personage is illustrated through a skillful display of relevant material. The educational objectives of these institutions should be, first, to create an accurate and pleasing atmosphere around the events or period they seek to illustrate and, second, to encourage the habit of historic pilgrimage through all the means in their power. The latter function requires a cooperative effort to provide publicity for residents and for tourists concerning the whole network of historic house museums throughout the country.

As an illustration of the difficulty of achieving joint direction in promoting historic pilgrimages, it might be pointed out that among the thirteen historic house museums in the immediate neighborhood of New York only two, Hamilton Grange and Philipse Manor Hall in Yonkers, are in the custody of a single

organization, the American Scenic and Historic Preservation Society. The organizations controlling the other houses range from the National Society of Colonial Dames of New York, in charge of Van Cortlandt House, to the Bronx Society of Arts and Sciences which has been given the custody of Poe Cottage by its owner, the City of New York. The task of persuading these various types of organizations to unite in a common program of publicity would be by no means light; yet the future of the historical pilgrimage as an educational instrument depends upon conveying to the casual traveler clear knowledge of the location and the associations of each site as part of an unfolding plan of personal exploration of the country's past.

Beyond Museum Walls

THE modern museum has reached a stage of development where it seeks to spread its educational message beyond its own walls. Exhibitions, intramural lectures, and museum activities can affect only that proportion of the community possessing the necessary leisure and inclination to pay frequent visits to museum buildings. Large museums feel a wider educational responsibility than can readily be met within the confines of a single location. When universities first realized that general education and the ease of modern communication obligated them to reach larger bodies than their chosen students, they created two instruments for popular learning—the university extension course and the university press. The invention of comparable means of extension education suited to museum characteristics remains a major problem of large museums at the present time.

The branch museum plays the part of the extension division in the educational structure of a museum located in a large city. These branches are intended to bring museum education directly to its potential consumers through exhibits placed in vacant stores or school buildings in crowded localities. Wherever the branch museum has been thoroughly tested as an edu-

cational experiment, it has proved a popular success both as to numbers in attendance and sustained interest. The circulating exhibition is a refinement of the conception of the static branch museum. At present, the Metropolitan Museum of Art in New York has a series of neighborhood circulating exhibitions in charge of Richard F. Bach, Director of the Department of Industrial Relations. Mr. Bach's report on the progress of this experiment is worthy of being quoted in full:

Of the Museum's seven Neighborhood Exhibitions five have been on tour in 1937; these were shown a total of nine times in eight locations, namely, four high schools, one library branch, one college, one museum, one "Y" branch. To all, the public was freely admitted; in some places the exhibition day was twelve hours long. A total attendance of 474,912 was recorded. This includes the 15,120 persons who attended the 423 gallery talks given by seven instructors-on-location. The instructors, as well as the necessary daytime guards, were furnished by the Works Progress Administration. Related lectures and motion picture showings, thirty-two in number, given in rooms adjacent to the exhibition galleries, brought a supplementary attendance of 3,109 persons.

While in 1936 a Neighborhood Exhibition program of ten months, with fourteen showings in fourteen locations, brought an attendance of 230,153, the 1937 program, covering but eight months, with only nine showings, brought an attendance over 200,000 greater. In this increase there is a twofold significance. On the Museum's side it has become necessary, from economic considerations, to choose locations where school or general population is most dense, in order to make the most of the limited funds available for work of this kind. On the side of the institutions in which the exhibitions are shown the increased attendance indicates that the collections have been used more extensively as collateral or research material in a number of subjects in the regular school curriculum or that they have been put to other constructive use in connection with a current program of activities.

There can be no question that in these Neighborhood Exhibitions the Museum has with simple directness met an important responsibility; for by this form of *museum extension* it has been able to make at least certain parts of its collections available—in fact, to make them handy—to hundreds of thousands of New Yorkers who can but rarely, if ever, come to the Museum building.¹

Similar extension services in the field of natural history have generally taken the form of the circulation of loan collections of materials relating to biology, nature study, and geography. These collections are almost exclusively for school purposes, though there would appear to be little reason why neighborhood circulating exhibitions in the natural sciences should not appeal as strongly to the adult public as those in the fine arts. The cost to the museum of circulating natural history exhibits is greater of course than in the case of the transportation of art objects. Even with this handicap it seems likely that enterprising natural history museums will soon invade the field of neighborhood display with portable exhibits designed to attract the attention of the adult public. Educational endowments might well be invested in testing out popular reaction to circulating displays of this nature.

One of the traditional forms of extension services common to both natural history and art museums is the lending of lantern slides. This service is still of great value in the education of children and adolescents. The time seems past, however, when it may be considered a dynamic instrument of adult education. It is no longer customary for family groups to gather round the magic lantern while educational slides are displayed by the head of the household.

¹ *Report of the Trustees of the Metropolitan Museum of Art for the Year 1937*, p. 44.

Slide collections lent by museums are now used for the most part by amateur or professional lecturers to clubs or other small groups. In many cases the museum provides a written lecture to be delivered in conjunction with the projection of slides. It is doubtful whether this form of educational activity is suitable for use with adult groups today. A serious group gathered to hear an illustrated lecture on art or the natural sciences is entitled to the services of a lecturer with wider knowledge of the subject than may be contained in the printed sheets supplied by the museum. Meetings at which questions can not be adequately answered or any spontaneous variations given to a prepared lecture are not stimulating to mature persons.

A more helpful development in extension education lies in the creation of circulating motion picture libraries. The American Museum of Natural History, for example, has a library containing 601 reels of 35 millimeter and 1,400 reels of 16 millimeter films. These are lent to schools and other institutions where they are correlated with courses of study. They are also available for loan to adult education groups throughout the country.

One of the most interesting possibilities for adult education in the natural sciences might lie in the fuller organization of film libraries. As instruments of intramural instruction, films are fairly widely used at the present time, within the limitations imposed by a scarcity of good material. For extension purposes, however, the quantity of subjects available would have to be increased by a very considerable extent. This would have to be done under the careful supervision of competent scholars who would maintain the scrupulous accuracy and clear purpose required of educational films. Individual short films are, in gen-

eral, too brief to convey adequate understanding of any topic. Several series of short films, arranged on different subjects, would probably constitute more satisfactory educational instruments.

The two principal handicaps to immediate action along such lines lie in the financing of the production of nature films and in the creation of an organization for their national distribution. The latter problem might be solved through the willingness of commercial film libraries to make their existing facilities available for distribution of educational films. Any arrangement of this kind, however, would depend on the ability of museums, either individually or collectively, to guarantee to the distributors a constant supply of technically excellent and well-arranged educational "shorts." It is doubtful whether any single museum could accept the heavy burden of this responsibility, nor does it seem possible that the natural history museums might feel obliged to enter a joint association to provide funds for the purpose. On the surface it would appear that natural history education through the use of films is a proper subject of experiment for one or more national societies, dedicated to the furtherance of the understanding of the natural sciences by the bulk of the people. If any such bodies should undertake this task, they will find that natural history and science museums have already prepared the ground for an educational organization that now awaits development through an adequate supply of funds and some form of central direction.

In the field of publications, museums are offering increasingly important contributions to popular education. Bulletins, magazines, and leaflets issued at regular intervals number several thousand. Besides these, special publications appear at frequent

intervals under the imprimatur of numerous famous museums. At one time a museum pamphlet might have been held synonymous with impenetrable scholasticism in the eyes of the lay public. This form of specialized publication is now reduced to one of the many types of printed matter produced by museums. Major museums, adequately endowed for the furtherance of research activities, will always remain under the obligation of publishing the factual results of their scholarly work. These publications, however, belong in the field of international learning and can not be cited as direct instruments of adult education on a popular level.

It is the tendency of both major and minor museums to experiment in popular expository literature that promises new developments of the means existing for the spread of knowledge. If an example is taken from the field of the natural sciences, it may be noted that the American Museum of Natural History, the Academy of Natural Sciences in Philadelphia, and the Buffalo Museum of Science sponsor, respectively, the magazines *Natural History*, *Frontiers*, and *Hobbies*. These publications are intended primarily for circulation among the museums' members, yet the skill displayed in their "make-up," the outstanding quality of their contributions, and the value of their unusual illustrations entitle them to a much wider audience.

From the educational point of view, it would seem desirable to emphasize the popular circulation of these periodicals as against their function as service organs to the limited group of museum members. In order to achieve this end, however, it would probably be necessary for the major museums of natural history to publish a single magazine, with a joint editorial board. Under such an arrangement each museum might publish an-

nouncements to its members in a special issue distributed from its own offices, or a general issue might bear the combined notices of all the contributing museums.

The advantages that a popular magazine of natural history sponsored by the major museums would possess over the ordinary commercial publications in this field are heavily weighted on the side of educational integrity and the supply of firsthand material. Disadvantages might naturally be expected in the technical business of distribution. The existence of the three major museum periodicals already in this field seems to indicate, however, that museum membership provides a basic subscription list for the maintenance of a popular journal of this description. The long-continued success of the *National Geographic Magazine* might encourage the exponents of other branches of the natural sciences to seek popular support for their publications.

The field of occasional publications in the natural sciences in general is devoted to contributions to the higher branches of scholarship. Opportunities for popular education through brief explanatory pamphlets apparently have been somewhat neglected. Costs of publication may have appeared too great to be balanced by an unknown demand for educational leaflets on specific topics. The Cleveland Museum of Natural History has published a series of popular interpretations entitled "Pocket Natural History," some of which are field guides and others simple stories gathered from studies of specialists. Among the published titles are *Indian Homes*, *Mound Builders*, and *Trees of Ohio and of Northeastern North America*, all written by Harold L. Madison.

There are two avenues for the possible development of the occasional pamphlet. Medium-sized museums might follow the

lead of the Cleveland institution and use their local collections as the bases for simple expository pamphlets of general interest. The cost of this procedure, however, might easily prove to be too great for the average museum. An alternative might be the publication of lucid descriptive pamphlets on popular aspects of American anthropology, geology, zoology, and kindred subjects by the major museums acting through a joint editorial board. These pamphlets could then be distributed for circulation by those natural history museums throughout the country whose collections touch on any of the material described in the publications.

In any case, the value to the adult public of museum collections in natural history is at present diminished by the lack of written expositions within the reach of the purse and the understanding of the ordinary man. There seems little hope of either commercial publishing houses or university presses lifting this burden from the shoulders of the museums. It can not be said that either major or minor museums lack the resources in scholarship or literary ability to present their fields to the adult public in an arresting manner. Limitations in literary output are imposed by the costs of the production of publications on a small scale and by a sharply defined reading public. One remedy for the condition would consist in a greater measure of cooperation on the part of all natural history museums in the matter of educational pamphlets.

Frequent consultation among the museums and perhaps the creation of a joint editorial board for popular publications might have the effect of providing efficient distributing channels for expository literature throughout the whole country. Various authorities located in different museums would have the

opportunity to contribute popular explanations of aspects of their subjects illustrated by museum collections in many cities. Receipts from sales conducted by a considerable number of institutions spread over the country might conceivably meet the costs of publication.

The question of literary publication by historical societies and museums of history has already been discussed. Extension education depends not only on the quantity of written material produced but also on its suitability to the interests and understanding of the adult public. In this connection Robert C. Binkley, writing in *Minnesota History*, the quarterly of the Minnesota Historical Society, delivers a sound warning:

We are well aware that just as genealogy has in some cases offered a superficial travesty of family history, so a type of promotional literature in our communities has in a superficial way called attention to the special excellencies and peculiarities of our various localities, and an antiquarian interest has resulted in the accumulation of diverse and unrelated items of information. This is not the kind of local history of which I speak.²

The understanding of the true nature of community history requires participation by the citizens in the writing as well as in the publication of historical data. New techniques of publication along the lines of micro-copying and other processes less costly than printing will have to be utilized by historical museums in the future. Bulky records and family histories must be preserved for popular use in less fragile and less expensive forms than those to which the professional scholar is accustomed.

An old controversy exists as to whether art forms should be

² Robert C. Binkley, "History for a Democracy." *Minnesota History*, 18: 1-27, March, 1937.

popularized through descriptive writings or by direct visual contact. Museum curators might have been tempted to emulate the aesthetic pontifications of John Ruskin and to dragoon their public into appreciation of fine arts through literary authoritarianism. Fortunately, they have refrained, and the publications of the major art museums are scrupulously factual. Perhaps the very care that has been employed to guard against a dangerous verbalization of aesthetics has prevented museum writings on art from reaching a wide popular audience. The sacrifice, if it exists, has been worth while; the cause of adult education is seldom harmed by awaiting the development of true instruments for its interpretation, while it rarely recovers from the success of false methods of propaganda.

The Museum of Modern Art of New York has experienced considerable success in the careful preparation of publications designed for a wide audience. The relation of artistic forms to modern living, described in terms of architecture, industrial design, or home decoration, is a topic particularly suited to popular writing. In the case of this Museum, costs of publication have proved the principal barrier to the wide distribution of literature.

An apparently inexpensive booklet, the catalogue of the Metropolitan Museum of Art for an Exhibition of Contemporary American Design, is an outstanding piece of intelligent bookmaking for the untrained public. It is entitled *The Architect and the Industrial Arts* and contains contributions by Armistead Fitzhugh, Raymond M. Hood, Ely Jacques Kahn, Richard F. Bach, Eliel Saarinen, Eugene Schoen, Leon V. Solon, and others, besides many excellent photographic illustrations.

An indictment may be made of the art museums throughout the country on the grounds that they do not display to the pub-

lic the excellent literature on relevant topics published by the whole body of museums. Sales counters where only the publications of the museum itself may be purchased are tokens of an educational blind spot in the sight of museum management. The general public would be wise to be intolerant on this subject, as art museums are the proper places for the distribution of literature on art published by any museum.

To discover, while making a tour through the medium-sized art museums of the country, that the outstanding publications of the Museum of Modern Art and the Metropolitan Museum of Art are nowhere displayed lessens faith in the educational purpose of the institutions visited. Certainly each art museum director must censor the publications he chooses to present for sale to the public, yet total exclusion of the products of every other museum seems too rigorous an attitude to adopt, outside New York or Boston. Popular publications on art topics are virtually barred from the museum world until costs of printing can be reduced by a generous circulation. There would seem to be no sound reason, from the educational point of view at least, why all art museums in the country should not unite to further the spread of helpful publications produced by any museum of good standing.

Literature as such is not the major weapon of extramural education by art museums. Reproductions of the museum's finest objects in color or in black and white provide the most effective means of impressing the public mind. Though American museums, in general, have taken considerable care to maintain a good supply of reproductions, they have seldom linked their distribution with direct educational objectives. The reproduction is treated as a souvenir, something by which the visitor

will remember the museum, and it is usually in the form and shape of a postcard.

It may be that there are many amateur students of art throughout the country who maintain large scrapbooks of reproductions of postcard size in order to gain growing knowledge from their faithful perusal. The ordinary visitor, however, moved by an object of fine art and consequently purchasing a postcard reproduction, can seldom find a suitable place for his venture in visual education. It is too small to frame, too perishable to leave on open shelves, and perhaps is safest in a cardboard box fastened with an elastic band. Museums cling to the postcard reproductions, partly because they are widely used in schools and in college courses and partly because the price is within reach of the most modest purse. It is suggested that an educational policy toward reproductions might first concern itself with the probable place of the article in the home of the purchaser. Color reproduction should constitute a library of living art, intended, as are all paintings, to hang on walls where they may be constantly enjoyed. Art museums might set for themselves the objective of bringing their collections into the daily lives of their communities through reproductions that could take a definite place in the scheme of home decoration.

Though the faithfulness of color reproductions of various masterpieces remains a technical problem to be settled only by competent experts, a little explored field exists in the educational arrangement of the various types of approved reproductions. Museums believing in the living message of art ought to accept responsibility for advising untrained visitors where and how to use good reproductions in their scheme of living.

A greater measure of coordination between the public rela-

tions and the educational divisions of art museums is desirable in handling the sale of reproductions. Skillful arrangement of series of reproductions according to definite educational plans might prove of considerable value to the general public. The linking of printed booklets with certain sets of reproductions also appears to be an educational possibility. It is doubtful whether art museums are pursuing a sound policy in limiting their distribution of reproductions to copies of the objects in their respective collections. Original works of art exhibited by any museum might gain greater public understanding if they were given a historical or a comparative background through reproductions of other objects not in the museum's possession. This task of providing intellectual depth to the impressions visitors receive from original works is one of the responsibilities of an educational division. Reproductions are potential tools whereby art appreciation can be systematized for the untrained adult without disturbing the aesthetic arrangement of the galleries.

Technical standards of excellence in art reproductions, together with the question of costs, create difficult problems for any single institution. If museums were willing to cooperate in the creation and distribution of art reproductions, both technical and educational standards might be greatly improved.

In general, the literary and illustrative services of museums throughout the country have remained comparatively unknown to individuals and groups who might have used them to great profit. The principal reason why these powerful instruments of adult education hitherto have been obscured may lie in the individualistic policies of the museums themselves. Publications of great intrinsic value in the educational field have been con-

fined to a narrow audience in the immediate vicinity of a particular museum. Literature or illustrations intended for popular use must be distributed on the widest possible scale, or the costs of publication will be prohibitive. It is uneconomic and unnecessary for each museum to act as a publishing house and retail store for its own products exclusively. The never-ending task of public education requires that every sound instrument of learning should be used to its full capacity in every corner of the land.

For Greater Public Support

COMMUNITIES build and maintain museums in the hope of improving the cultural life of their regions. Facilities for intellectual enjoyment depend to a considerable extent on the possession of physical materials: objects of art, historical relics, and scientific specimens. The organization of these materials, once acquired, and their proper presentation for public use lies, in general, beyond the powers of civic authorities. Museum staffs are, accordingly, appointed to act as the direct custodians of both the physical and the educational values of the collections.

The preceding pages contain an account of some of the methods used by museum authorities to fulfill their educational responsibilities. When the realm of museums embracing art, science, history, industry, and commerce is viewed as a whole, however, the striking fact becomes apparent that organization for educational purposes is usually fortuitous and haphazard. Though the aggregate annual income of public museums has been estimated at over \$15,000,000¹—and this fund must be considered primarily dedicated to direct or indirect education—

¹ Laurence Vail Coleman, "Recent Progress and Condition of Museums." *Biennial Survey of Education in the United States, 1928-30*, p. 6. United States Government Printing Office, 1932.

no central educational councils exist to coordinate the plans and techniques of museum instruction in the fields of science, art, and history. Each institution pursues its separate way, approaching its obligations for popular education in terms of its own clients and the limited resources of its own personnel. It is obvious that a piecemeal approach to problems of popular education by institutions of like character is essentially wasteful, that common planning and joint appraisal of methods would permit a greatly increased rate of progress.

Neither schools nor universities could afford to exist in the individual isolation that museums customarily seek in educational matters. Perhaps the cause of this difference lies in the vague character of the museum's clientele in the field of adult education. The student bodies of formal institutions of learning possess concrete needs that must be met by the maintenance of coordinated educational plans throughout the country. In contrast, the museum's adult customers are a mere cross section of the unorganized public, doubtful concerning their own needs and unaware that they share common interests with their fellow beings elsewhere. Little pressure, accordingly, has been brought to bear on museum authorities from their own consumers to organize a single system of museum education.

In fairness to the museums themselves, it should be said that national societies for the dissemination of knowledge in science, history, and art are the proper bodies to undertake the task of planning coordinated methods of study to meet popular demands. As a question of fact, however, these societies have either grown away from their original fullness of purpose—as in the case of the venerable academies of science—or have become narrowly localized in the manner of historical societies. The museum itself

is often the product of energies and funds expended in the heyday of earlier organizations. As such it is the inheritor of their responsibilities.

The initiative for action now rests solely with the museum organizations, including both the American Association of Museums—the national body—and the groups responsible for the furtherance of popular knowledge in the fields of art, science, history, and industry. It is not necessary to visualize any interference with the autonomy of individual museums in the planning of educational programs that will be common throughout the country. The extent of consultation and mutual exchange of information desirable among museums concerned with the same educational subjects would be no greater than that at present taking place in regard to practical questions such as the lighting of halls and the making of display cases.

In practice, a coordinated educational program will be launched by museums when individual institutions learn to link their offerings with the expressed needs of functional groups in their communities that are organized on a national basis. Trade unions, for example, are to be found in every locality. These bodies possess the means to study the educational desires of their members in relation to a particular museum. If an experiment is carried out successfully in one locality, its results are broadcast by national headquarters through all branches of the organization, and usually the procedure is imitated in many other regions. In this connection, the recent experiment of the Baltimore Museum of Art in enlisting the aid of the functional groups in its community in an analysis of educational programs marks an interesting forward step in the development of the American museum.

Efforts of this description undertaken by individual museums to discover their true audience should result in a growing demand on the part of coordinated bodies throughout the nation to utilize museum materials for the cultural advancement of their members. Museums as an integrated body may then find it necessary to lay down educational standards and methods that will be commonly recognized throughout the country. When this stage is reached, the term "museum education" will have a concrete meaning. The social recognition of the value of museum work that should follow a rise in the prestige of museum education will probably react not only on the use that the general public makes of its museum collections but also in the support that it accords through public and private funds.

Besides the responsibility resting on museums in relation to the creation of education values for their public, a like obligation exists as to the creation of standards of internal educational organizations within the museum itself. For many reasons museum staffs, whether in art, science, history, or industry, are seldom organized in terms of educational efficiency. The care of the physical property and the classification of materials have, in general, determined the selection and government of the museum personnel. The learned men who provide meaning, as far as the public is concerned, to the whole apparatus of buildings and materials are too often separated from their potential audiences by a screen of routine work and private researches. Neither trustees nor directors as individuals can be entrusted with planning and carrying out educational programs. Only one competent educational authority can be recognized in any institution—that of the whole body of scholars engaged in studying the materials available in their respective fields. In the case

of museums, this educational senate must be composed of the curators and their several staffs. It is not until they have assumed responsibility in the eyes of the world for the total educational work of the museum that museum education can claim to rank with that of universities and other accepted educational bodies.

At present, museum education, even in the case of our larger institutions, is not being underwritten by the scholarly reputation of the distinguished men on the museum staff. Though curators might play only a slight part in popular instruction, their authority and knowledge are essential to the planning and supervision of educational programs. True self-government in institutions devoted to the dissemination of learning is a duty rather than a liberty. Scholars themselves must maintain control of the channels through which their findings are transmitted to the public if an educational institution is to hold its integrity. In practice, the small museum, where a limited staff carries on varied duties, approximates this ideal of educational organization more closely than the larger museums. The latter institutions tend to be departmentalized to a degree that hinders cooperative planning of educational policies by the staff. Education, in consequence, is apt to become the responsibility of the director alone or, alternatively, a department by itself created as a stepchild in the curatorial family.

Popular education can not be created by executive action. It arises, at least in its most honest form, from the imaginative efforts of men of great learning forced to consider how their erudition can best be transmitted to an untrained audience. The recent volume by Albert Einstein,² where the mathematician

² Albert Einstein and Leopold Infeld, *Evolution of Physics*. Simon and Schuster, 1938.

translates his difficult theories for the lay reader, is an example of the willingness of the highest genius to attempt this task. It would be foolish, however, to assume that such undertakings are either natural to the mind of a research scholar or that they enhance his standing in the eyes of his colleagues.

Universities originally were created and organized around the realistic acceptance of the retiring and introverted nature of scholarship. Learned men were gathered from their hermitages by the lure of food, shelter, and intellectual companionship. The price they had to pay for being cosseted in this fashion was to provide answers to the innumerable questions of a student body whose pestering attentions interrupted their studies and meditations. The present organization of universities seeks to maintain a precarious balance between pestering their men of learning to their scholarly death and allowing their faculties to slip into a Nirvana of introverted research. Self-government in relation to educational duties has proved one of the most effective means of persuading scholars to accept their full responsibilities.

In the case of museums, men of learning have been protected to a considerable extent from contact with the curious public. Their professional careers have become dependent on the value a small number of fellow specialists place on their work. The task of integrating their researches with developments in kindred fields or of explaining their scholarship in terms of social action has seldom been laid on curatorial shoulders. This is a consequence of museum organization and not a result of limited abilities or defective social imagination on the part of the scholars themselves.

It is doubtful whether the abdication of the scholar from the field of popular interpretation has brought benefits to the pro-

fession of museum scholarship as a whole. While permitting the expenditure of more time and energy on basic research, it also has limited the necessary support for research work of any kind. As the general public has been denied direct access to the scholarly world of museum research, it has seldom felt constrained to lend its social and financial support to the furtherance of a seemingly aloof profession. The tools of research are men, materials, and equipment, and these have to be supplied by public or semipublic funds. It is possible, then, that the total amount of pure research achieved in museums might be greater rather than less if organization existed to interpret the findings of scholarship directly to the purse-holding public.

When the curatorial bodies of museums have assumed the position of self-governing educational authorities, responsible to the public for the output of their institutions, the few problems of educational organization that remain will be of a technical nature. Education requires the use of many specialized aptitudes, and the scholar, the lecturer, the guide, and the demonstrator are not necessarily combined in the same person. The daily task of handling public audiences need not be left to the curators alone. Their responsibility as a group is to plan courses of study; to guarantee with their scholarly reputation the content of the information disseminated; and to originate new points of contact between erudite research and the popular imagination. It is necessary that they should exercise these functions as an authoritative group because no special subject can safely be presented without some measure of integration with other subjects in the same general field.

When comparison is made with the elaborate machinery of universities or schools, museums can be considered backward

in educational organization. This very backwardness, however, may be construed as fortunate. Museums have been awaiting their true audience before they created an educational system to meet its potential needs. If they had followed heedlessly in the wake of universities, they might have become entangled in the limitations of formal education for a youthful student body. The possibility of continuous education for adults is a recent development of our social and cultural system. Here lies the true field for the museum educator, and he must proceed with cautious independence to discover methods of ensnaring the minds of this novel audience.

The museum takes its place in this ambitious plan of popular culture as a reserve force of unknown strength. We have flung our school and university systems into the front ranks and they are now old campaigners entangled in a routine struggle. Museums still possess the rare freedom of maneuver in the educational field. Granted sound generalship and intelligent public support, they may yet provide the extra force needed to make popular education a dominant instrument of social control.

Index

- Academies of science, origin and history of, 6-7
- Adult education, 47, 108, 114, 116, 122, 129-30; definition, 24; art appreciation courses, 53-61, 64-67; principles of, 63; music courses, 66-67; radio courses, 120; more than intellectual opiate, 135; as method of social control, 135
- Adult education councils, link between community and museums, 114
- Albert, Prince, quoted, 10
- American Association of Museums, 165
- American Federation of Arts, traveling exhibitions, 85-86
- American Federationist*, 80
- American Historical Review*, *The*, 140
- American Museum of Natural History, 6, 25, 44, 94, 103, 104; financial support, 22; Akeley Hall, 97; courses on fee basis, 113; Hayden Planetarium, 114; educational planning, 116; Trailside Museum, 121; motion picture library, 152; publishes *Natural History*, 154
- American Scenic and Historic Preservation Society, 148
- Architect and the Industrial Arts, The*, 158
- Art appreciation, 53-54; courses: 55-61, 64-67; value of, 58-60; cost of, 60-61
- Bach, Richard F., 158; quoted, 150-51
- Baltimore Museum of Art, 25, 64, 80-81; group representation, 25; analysis of educational programs, 165
- Barrett, Samuel A., 37
- Bartlett, Florence Dibell, Fund, 62-63; lectures, 63, 64-65
- Binkley, Robert C., quoted, 157
- Boston, Museum of Fine Arts, 20, 62, 72, 75-76
- Boyd, Julian P., quoted, 140
- Boyle, Robert, 3, 4
- British Broadcasting Corporation, 120
- British Museum, creation of, 4
- British Trade Union Congress, 124
- British Workers' Educational Association, 124

- Bronx Society of Arts and Sciences, 148
- Brooklyn Museum, 58
- Buffalo Museum of Science, 23-24, 94, 98, 104-5, 116; courses on fee basis, 113; publishes *Hobbies*, 154
- Buffalo Society of Natural Sciences, 23-24; *see also* Buffalo Museum of Science
- Cabildo Museum, 145
- California State Exposition, 134
- Carnegie Corporation of New York, grants, 55, 67
- Carnegie Institute, 81-82
- Carnegie Museum, 1, 94, 116
- Chambers's *Cyclopaedia*, 4
- Charles-Town Library Society, 5
- Chicago, Art Institute of, 62-65, 76; art appreciation courses, 64-65; Department of Education, 65
- Chicago, Museum of Science and Industry, 35, 123, 126-27, 131
- Chicago Academy of Sciences, 99-100
- Chicago Historical Society, 33, 35, 137, 142
- Cincinnati Art Museum, 55-61
- Circulating exhibits, *see* Exhibitions
- Cleland, R. G., 34
- Cleveland Museum of Art, 77; art and music appreciation courses, 66-67
- Cleveland Museum of Natural History, 94, 98, 104, 116, 120-21; "Pocket Natural History," 155
- College museums, *see* Museums, university and college
- Colonial Dames, National Society of, 148
- Colorado Museum of Natural History, 99, 116
- Columbus Gallery of Fine Arts, 41-42
- Coke, Edward, 142
- Coke on Littleton*, 142
- Coleman, Laurence Vail, quoted, 141
- Comenius, 3
- Corporation for the Propagation of the Gospel in New England, 3
- "Crystal Palace and its Lesson, The," 11
- Dana, John Cotton, 80
- Dartmouth College, museum collection, 6
- Davison, F. Trubee, 116
- Detroit Institute of Arts, 82
- Detroit Museum of Art, 52, 77
- Detroit Photographic Salon, 82
- Dioramas, 36-37, 144
- Ducasse, C. J., quoted, 73
- Edison Institute, 123; Museum, 132-33
- Einstein, Albert, 167
- Empire Marketing Board, 133
- Encyclopaedists, program of, 5
- Essex (Mass.) Historical Society, 8
- Exhibitions, means of promoting popular learning, 32; permanent, 79; temporary: 79-88; adjustable to needs of community, 80, 83-85; means of linking art to specialized interests, 81; cost of, 85-87; danger of overcentralization, 88; traveling, 87-88; circulating, 150-51
- Farrand, Max, 34

- Field Museum of Natural History, 44, 94, 103, 104; Stanley Field Hall, 97-98; *Handbook*, 111-12
- Films, *see* Motion pictures
- Financial aid and support, 17, 21-22, 24, 36, 37, 49, 55, 67; for specific types of activity, 39-40; for research, 44-45; for adult education, 47; for art appreciation courses, 60-61, 64-65; for temporary exhibits, 85-86, 87; of state museums of natural history, 102; of natural history museums, 117-18; for circulating exhibits, 151; for film libraries, 153; of publications, 155-56, 158, 159; annual incomes of museums, 163
- Fitzhugh, Armistead, 158
- Fogg Art Museum, 20, 72
- Folk art, 53
- Ford, Henry, 132
- Franklin, Benjamin, 128
- Franklin Institute of Philadelphia, 11, 123, 128, 131
- Frick art collection, 50
- Frontiers*, 154
- Gardner, Isabella Stewart, 20
- Gardner Museum, 20-21
- Gilman, Benjamin Ives, quoted, 53
- Greeley, Horace, quoted, 11
- Gruenberg, Benjamin C., quoted, 95-96
- Hamilton Grange, 147
- Hamlin, Chauncey J., 24
- Harvard College, "experimental philosophy," 4, 9-10; Museum, Mineralogical Collection, 6
- Hayden Planetarium, 114
- Herron Art Museum, 83
- Historic houses, 141, 146-48; *see also* Historical societies; Museums, historical
- Historical museums, *see* Museums, historical
- Historical societies, 8, 33, 136-42, 148; and museums of history, 136-37; functions of, 138; publications, 139-41; place of, 142; *see also* Museums, historical; Historic houses
- Hobbies*, 154
- Hodge, M. B., 31-32
- Hood, Raymond M., 158
- Howald, Ferdinand, 41
- Huntington, Henry E., 51
- Huntington, Henry E., Library and Art Gallery, 33-34, 145
- Huyge, René, 13; quoted, 9
- Industrial art, 72; medium for giving progress of economic system, 87
- Industrial fairs, 11
- Jennings, O. E., quoted, 108-9
- Joslyn Memorial, 18
- Kahn, Ely Jacques, 158
- Kensington Science Museum, 127-28
- Kenyon, Frederic George, quoted, 137-38
- Keppel, Frederick P., quoted, 46
- Layton Art Gallery, 42
- Lesueur, Charles, 7
- Los Angeles, lacks art facilities, 51
- Louisiana Historical Society, 137
- Luxembourg, collections, 4

- Maclure, William, 6
- Madison, Harold L., 155; quoted, 98-99
- Maine Historical Society, 8
- Maryland Academy of Sciences, 114-15
- Massachusetts Historical Society, 8, 136
- Mechanics' institutes, and museums of science and industry, 125-26
- Mellon art collection, 50
- "Men or Machines," 124
- Metropolitan Museum of Art, 62, 76, 77, 150-51; Cloisters branch, 51; art instruction, 62-64; publications, 158-59
- Milwaukee Art Institute, 42
- Milwaukee Public Museum, 36-37; use of dioramas, 36, 144; finances, 36, 37
- Minneapolis Institute of Arts, 82
- Minnesota Historical Society, 138, 139, 140; publications of, 139; *Minnesota History*, 157
- Minnesota History*, 157
- Missouri Historical Society, 140
- Morgan, J. P., art collection, 50
- Motion pictures, in museums, 119-20; circulating libraries of, 152; financing and distribution of, 153
- Munro, Thomas, quoted, 66-67
- Museum and the Community*, *The*, 5, 22
- Museum of Modern Art, 72, 87, 158, 159; traveling exhibitions, 86; publications, 158
- Museum personnel, 23, 78; task of, 16, 169-70; obligations, 27; indifference toward social responsibilities, 45-46; arrangement of collections, 82; participation in educational programs, 166-67
- Museums: history and development, 1-5; 15, 17, 30, 39; as repositories, 9, 78; and world's fairs, 10; visual education, 10, 11, 12, 28, 33, 96, 133; personnel, 16, 23, 27, 45-46, 78, 82, 166-67, 169-70; financial support, 17, 21-22, 39-40, 44-45, 47, 163; privately endowed, 17-21; and communities, 20, 21; boards of trustees, 22-23, 26-29, 37, 166; aims and objectives, 23, 32, 39, 40-47, 78; control of, 27, 28; research, 30, 43-46; exhibitions, 32, 150, 151; collections, 40-43; cooperation with professional groups, 45, 46; dissemination of knowledge, 46-47; adult education activities, 47, 53-61, 64-67, 120; private collections of art, 50-51; art appreciation, 53-54; media for industry and commerce, 87; cooperation with national associations, 102, 104, 164-65; and adult education councils, 114; trail-side, 120-21; branch, 149-51; publications, 153-59; haphazard organization for education, 163; analysis of clientele, 164-65; compared to universities, 168, 169-70
- Museums, art, 48-88; number, 49; annual income, 49; value of buildings, 49; should make offerings widely available, 52-53; educational techniques, 61; objectives, 69; as storehouses, 71; arrangement of collections, 74-78; use of repro-

- ductions, 78, 159-62; and trade unions, 80-81; circulating exhibitions, 150-51; lending of lantern slides, 151; circulating motion picture libraries, 152; publications, 158-59; coordination of departmental activities, 160-61
- Museums, historical, 48-49, 136-48; and historical societies, 136-37; state, 140; number, 141; use of dioramas, 144; as historic monuments, 145; as educational institutions, 145; *see also* Historical societies; Historic houses
- Museums, natural history, 14, 89-122; in colleges and universities, 5-6, 100, 110-11; annual income, 49; promotion of scholarly research, 92-93; definition, 94; need of dramatic display, 96; visual education, 96; in average-sized cities, 99; small, decay of, 100-1; state, 101, 102; large, model for nation, 103-4; joint action of recommended, 105-7; training of children, 108-9; courses on fee basis, 113; educational planning, 116; adult education program, 116, 122; administration of, 117; research work vs. instructional activities, 117-18; use of motion pictures, 119-20, 152, 153; use of radio, 120; trail-side museums, 120-21; nature trails, 120-21; field excursions, 121; loan collections, 151-53; publications, 153-57; nationwide circulation of publications advocated, 154-55; development of occasional pamphlet, 155-56
- Museums, science, industry, and commerce, 33, 35-36, 123-35; number, 48-49; annual income, 49; growth, 123; and mechanics' institutes, 125-26
- Museums, university and college, 5-6, 26, 100, 110-11
- Museums of commerce, *see* Museums, science, industry, and commerce
- Museums of industry, *see* Museums, science, industry, and commerce
- Music courses, 66-67
- National Geographic Magazine*, 155
- National Society of Colonial Dames, 148
- Natural History*, 154
- Natural history museums, *see* Museums, natural history
- Nature study, 102-3; based on school curriculum, 109; for untrained adult, 109; trails, 121-2
- Nelson Galleries of Art, 18-19, 77
- New Hampshire Historical Society, 8
- New York, American Institute of the City of, 11, 12
- New York, Museum of the City of, 25, 35; use of dioramas, 144
- New York Academy of Sciences, 6
- New York Historical Society, 8, 137
- New York Museum of Science and Industry, 25, 35, 123, 131; analysis of audiences, 129
- New York State Museum, 135
- Newark Museum, 80
- Ohio, University of, museum, 6
- Ohio Historical Society, 140

- Ohio State Museum, 101-2
 Owen, Robert, 7
- Parker, Arthur C., quoted, 136-37
 Parker, Helen, 65
 Peabody Museum of Natural History, 6
 Pelikan, Alfred G., 42
 Pennsylvania, University of, museum, 27, 94, 104
 Pennsylvania Historical Society, 140
 Pennsylvania Museum of Art, 75-76
 Permanent exhibits, *see* Exhibitions
 Philadelphia, Academy of Natural Sciences of, 6, 94, 104, 116; Ludwick lectures, 119; publishes *Frontiers*, 154
 Philadelphia, Centennial Fair, 13
 Philadelphia Centennial Exhibition, 72
 Philadelphia Commercial Museum, 133-34
 Philadelphia Museum of Art, 49, 62; *see also* Pennsylvania Museum of Art
 Philadelphia Museum of Science and Industry, 35
 Philipse Manor Hall, 147
 "Pocket Natural History," 155
 Poe Cottage, 148
 Public schools, and natural history museums, 108-9, 151; and commercial museums, 133
 Publications, 139-41, 153-59; experiments in, 154; wider circulation advocated, 154, 158-59; cost of, 155-56, 158, 159; participation by citizens in preparation, 157
- Quintana, Ricardo, 34
- Radio broadcasts, 84, 120
 Rea, Paul, 22; quoted, 5, 38
 Rhode Island Historical Society, 8
 Rockefeller, John D., Jr., 51
 Rosicrucians, 1, 2, 3
 Royal Society, 3
 Ruskin, John, 158
- Saarinen, Eliel, 158
 St. Louis, City Art Museum of, 67-68, 77
 San Francisco, art collections, 51
 Sankey, Lord, 24
 Say, Thomas, 6
 Scammon Fund, lectures, 64
 Schafer, Joseph, 139-40
 Schoen, Eugene, 158
Science and the Public Mind, 95
 Science museums, *see* Museums, science, industry, and commerce
 Sewter, A. C., 58
 Shad, Robert O., 34
 Siple, Walter H., 55, 59
 Slosson, E. E., 95
 Smithsonian Institution, 143
Societas secretorum naturae, 3
 Solon, Leon V., 158
 Speakman, Thomas H., 6
 Spratt, Thomas, quoted, 4
- Tarkington, Booth, 83
 Thomas, Stephen, 102
 Toledo Museum of Art, 26
 Trade associations, 105
 Trade unions, and art museums, 80-81; education of members through museums, 165
 Trailside museums, *see* Museums

- Traveling exhibits, *see* Exhibitions
- Treide, Henry P., 24-25
- Trustees, boards of, 22-23; responsible for community-museum relations, 26; obligations, 27; selection of, 28-29; as active governing bodies, 29; educational objectives of, 37; participation in educational programs, 166
- United States National Museum, 143
- Universities and colleges, museums of natural history, 5-6, 26, 100; extension divisions, work in natural sciences, 110-11; compared to museums, 168, 169-70
- University museums, *see* Museums, university and college
- Van Cortlandt House, 148
- Veblen, Thorstein, 50
- Virginia Historical Society, 140
- Visual education, 10, 11, 12, 28, 96, 133; limitations of, 33; through natural history museums, 96
- Watson, Dudley Crafts, lectures, 64
- Whitman, Walt, quoted, 12
- Whitney Museum of American Art, 87
- Winser, Beatrice, 80
- Winthrop, John, 4
- Wisconsin, University of, library, 140
- Wisconsin Historical Museum, 139-40; publications, 139-40
- Wolf, B., quoted, 124
- Worcester Art Museum, 17, 67, 77
- Works Progress Administration, 120-21
- World's fairs, 10

STUDIES IN THE SOCIAL
SIGNIFICANCE OF ADULT EDUCATION
IN THE UNITED STATES

A series of studies to be issued over a five-year period by the American Association for Adult Education with the aid of funds made available by the Carnegie Corporation of New York

PUBLISHED TITLES ON PAGE ii

IN PREPARATION

(Titles given are tentative)

14. *The Museum and Popular Culture* by T. R. Adam
15. *Agricultural Extension* by Russell Lord
16. *Health Education for Adults* by Frank Ernest Hill
17. *Programs of Social Work and Group Work Agencies*
by Gaynell Hawkins
18. *Adult Education through Churches*
by Bernard E. Meland
19. *A Bibliographical Study of Adult Education*
by Ralph A. Beals and Leon Brody

OTHER TITLES IN THE SERIES
WILL BE ANNOUNCED LATER



WHITNEY MUSEUM LIBRARY

AM7 .A33

STACKS

Adam, Thomas Ritchi/The museum and popul



3 2790 00003 0526



